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(21) International Application Number: PCT/US98/06956 (22) International Filing Date: 10 April 1998 (10.04.98) (30) Priority Data: 08/837,312 10 April 1997 (10.04.97) US (71) Applicant: GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). (72) Inventors: JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). (74) Agent: SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs) (57) Abstract <p>Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.</p>		

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SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

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Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

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Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

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Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted

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proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

5 The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

20 In other embodiments, the present invention provides an isolated polynucleotide
 consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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 15 NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID
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 20 NO:1501, SEQ ID NO:1502, SEQ ID NO:1503, SEQ ID NO:1504, SEQ ID
 NO:1505, SEQ ID NO:1506, SEQ ID NO:1507, SEQ ID NO:1508, SEQ ID
 NO:1509, SEQ ID NO:1510, SEQ ID NO:1511, SEQ ID NO:1512, SEQ ID
 NO:1513, SEQ ID NO:1514, SEQ ID NO:1515, SEQ ID NO:1516, SEQ ID
 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;
 25 or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

DETAILED DESCRIPTION

30 The nucleotide sequences of the sESTs of the present invention are reported in the
 Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each
 SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

	1	BK8	32		62	DY307	93	DY611
5	2	BV216	DW1001		63	DY643	94	EC259
	3	BV274	33	DW831	64	DY656	95	DY711
	4	BV48	34	DW859	65	DY675	96	EC248
	5	DN351	35	DW875	66	DY988	97	EC32
	6	DN381	36	DW888	67	DY992	98	DO703
10	7	DN405	37	DW901	68	DY225	99	DO713
	8	DU651	38	DW902	69	DY236	100	DR294
	9	DU660	39	DW904	70	DY242	101	DY1
	10	DU675	40	DW905	71	DY254	102	DY10
	11	DU684	41	DW906	72	DY914	103	DY106
15	12	DD364	42	DW929	73	DY946	104	DY117
	13	DD379	43	DW981	74	DY955	105	DY148
	14	DD389	44	DX191	75	DY959	106	DY167
	15	DD401	45	DX219	76	DY961	107	DY17
	16	DD413	46	DX245	77	DY981	108	DY174
20	17	DD426	47	DX256	78	DY357	109	DY175
	18	DD428	48	DX267	79	DY358	110	DY178
	19	DN293	49	DX66	80	DY381	111	DY23
	20	DD454	50	DX81	81	DY413	112	DY27
	21	DD472	51	DY780	82	DY414	113	DY41
25	22	DD475	52	DY803	83	DY415	114	DY42
	23	DT306	53	DY809	84	DY431	115	DY8
	24	DW282	54	DY814	85	DY433	116	DY93
	25	DW300	55	DY261	86	DY436	117	EB107
	26	DW303	56	DY264	87	DY543	118	EB113
30	27	DW323	57	DY266	88	DY565	119	EB163
	28	DT258	58	DY271	89	DY585	120	EB25
	29	DW246	59	DY287	90	DY331	121	EB77
	30	DW324	60	DY297	91	DY586	122	EC172
	31	DW333	61	DY306	92	DY696	123	EC302

	124	EC317	158	EJ90	192	EJ224	226	EP378
	125	EC328	159	EM270	193	EJ240	227	EP38
	126	EC341	160	EM278	194	EJ254	228	EO109
	127	EC349	161	EN186	195	EJ258	229	EO120
5	128	ED105	162	EN215	196	EJ265	230	EQ166
	129	ED21	163	EN217	197	EJ280	231	EQ187
	130	ED23	164	EN234	198	EJ285	232	EQ188
	131	ED30	165	EN239	199	EJ307	233	EQ190
	132	ED43	166	EN256	200	EJ38	234	EQ194
10	133	ED54	167	EN260	201	DO235	235	EQ207
	134	EE177	168	EN264	202	DO238	236	EQ208
	135	EE65	169	EN266	203	DO263	237	EQ214
	136	DQ365	170	EN271	204	DO319	238	EQ215
	137	DK393	171	EN274	205	EJ324	239	EQ218
15	138	DK399	172	EN287	206	EN470	240	EQ219
	139	DO1128	173	EN310	207	EN477	241	EQ220
	140	DO1150	174	EN342	208	EN539	242	EQ221
	141	DZ34	175	EN363	209	EP451	243	EQ226
	142	DZ42	176	EN423	210	EO10	244	EQ229
20	143	EE116	177	EH106	211	EO14	245	EQ230
	144	EE93	178	EH145	212	EO48	246	EQ231
	145	DJ387	179	EH166	213	EO58	247	EQ233
	146	DJ402	180	EH167	214	EO60	248	EQ237
	147	DN551	181	EH178	215	EO62	249	EQ261
25	148	DN559	182	EH180	216	EO68	250	EQ272
	149	DN603	183	EH186	217	EO89	251	ER104
	150	DN629	184	EH188	218	EO90	252	ER106
	151	DN631	185	EH189	219	EO92	253	ER128
	152	DO11	186	EH190	220	EO97	254	ER134
30	153	DO118	187	EH203	221	EP108	255	ER174
	154	DO15	188	EH206	222	EP165	256	ER201
	155	DO157	189	EH95	223	EP219	257	ER77
	156	DO19	190	EJ148	224	EP234	258	ER80
	157	EJ53	191	EJ179	225	EP277	259	ER97

	260	ES136	294	ER399	328	FB264	362	FG208
	261	ES306	295	ER408	329	FB38	363	FG265
	262	ES35	296	ER418	330	FB71	364	FG274
	263	ES37	297	ER430	331	FB78	365	FG278
5	264	ES206	298	ER471	332	FC12	366	FG281
	265	ET13	299	ER476	333	FB349	367	FG291
	266	ET22	300	ER493	334	FC136	368	FG294
	267	ET39	301	ER496	335	FC170	369	FG340
	268	ET84	302	ER498	336	FD152	370	FG363
10	269	EF121	303	ER524	337	FE141	371	FG372
	270	EF129	304	EW13	338	FE5	372	FG380
	271	EF45	305	EX25	339	FD131	373	FG401
	272	EF48	306	EX53	340	EC425	374	FG99
	273	EF5	307	EY165	341	EC428	375	FI203
15	274	EF88	308	EY29	342	ED204	376	FE311
	275	EG194	309	EZ35	343	ED205	377	FE315
	276	EG251	310	EZ4	344	ED210	378	FE322
	277	EH12	311	EZ88	345	ED223	379	FE329
	278	EH213	312	EZ93	346	DI301	380	FE341
20	279	EH22	313	FA8	347	DI303	381	FE366
	280	EH221	314	EV234	348	DI310	382	FE375
	281	EH248	315	EW101	349	DI39	383	FE412
	282	EH29	316	EW109	350	DJ90	384	FE415
	283	EH61	317	EW150	351	DM290	385	FE442
25	284	EH68	318	EY197	352	DM304	386	FE472
	285	EH78	319	EY206	353	DN618	387	FE557
	286	EH80	320	EY215	354	DN896	388	FE568
	287	ER311	321	EZ209	355	DN904	389	FE619
	288	ER329	322	FA139	356	FG119	390	FE676
30	289	ER343	323	FA171	357	FG126	391	FE682
	290	ER366	324	FA252	358	FG140	392	FF150
	291	ER369	325	FA28	359	FG193	393	FF153
	292	ER381	326	FA316	360	FG197	394	FF168
	293	ER395	327	FA95	361	FG198	395	FF175

	396	FF181	430	FH17	464	FN203	498	FO201
	397	FF46	431	FH170	465	FN228	499	FO209
	398	FF49	432	FH24	466	FN229	500	FO211
	399	FF97	433	FH3	467	FN251	501	FO215
5	400	FG41	434	FH39	468	FN254	502	FO253
	401	FG437	435	FH56	469	FP134	503	FO254
	402	FG441	436	FH6	470	FP14	504	FO261
	403	FG448	437	FH66	471	FP163	505	FO267
	404	FG45	438	FM109	472	FP172	506	FO275
10	405	FG492	439	FM13	473	FP71	507	FO290
	406	FG504	440	FM15	474	FP87	508	FO292
	407	FG565	441	FM150	475	EI118	509	FO316
	408	FG567	442	FM170	476	EI16	510	FO324
	409	FG57	443	FM28	477	EI187	511	FO327
15	410	FG577	444	FM3	478	EI203	512	FO348
	411	FG615	445	FM32	479	EI228	513	FO36
	412	FG625	446	FM36	480	EI231	514	FO38
	413	FG630	447	FM60	481	EI236	515	FO40
	414	FG659	448	FM86	482	EI239	516	FO66
20	415	FG708	449	FM95	483	EI243	517	FO75
	416	FG91	450	FM98	484	EI250	518	FP185
	417	FG884	451	FM99	485	EI255	519	FP193
	418	FG891	452	FN172	486	EI264	520	FP233
	419	FG909	453	FN19	487	EI273	521	FP239
25	420	FG912	454	FN29	488	FO11	522	FP246
	421	FG949	455	FN53	489	FO125	523	FP262
	422	FG952	456	FK199	490	FO128	524	FP268
	423	FG965	457	FK217	491	FO133	525	FP271
	424	FH10	458	FK23	492	FO135	526	FP273
30	425	FH116	459	FK32	493	FO147	527	FQ505
	426	FH123	460	FK59	494	FO152	528	DN647
	427	FH13	461	FK78	495	FO160	529	DN650
	428	FH136	462	FN189	496	FO173	530	DN676
	429	FH149	463	FN191	497	FO182	531	DO94

	532	FR292	566	DN827	600	FY201	634	DU4
	533	FR436	567	DN833	601	FY202	635	DU75
	534	FR451	568	DN834	602	FY243	636	FY386
	535	FR473	569	DN850	603	FY265	637	FY388
5	536	FS10	570	DO913	604	FY316	638	FY398
	537	FS106	571	DO923	605	FY318	639	FY414
	538	FS107	572	DO935	606	FY321	640	GA48
	539	FS143	573	DO938	607	FY354	641	GA63
	540	FS173	574	DO944	608	FY356	642	GA64
10	541	FS28	575	DO949	609	FY421	643	DT382
	542	FS31	576	DO952	610	FY430	644	DT385
	543	FS40	577	DQ12	611	FY455	645	DT388
	544	FV35	578	DT2	612	FY484	646	DT464
	545	FV49	579	DT44	613	FY524	647	DT470
15	546	FV68	580	DT53	614	FY530	648	DT478
	547	FW13	581	DT8	615	FY628	649	DT482
	548	FW64	582	FQ661	616	DQ242	650	DU114
	549	FY127	583	FQ672	617	DQ262	651	DU118
	550	FY136	584	FQ696	618	DQ276	652	DU123
20	551	FY60	585	FR1087	619	DQ285	653	DU133
	552	FY65	586	FR927	620	DQ304	654	DU156
	553	FY72	587	FR938	621	DQ313	655	DU157
	554	DN1112	588	FR980	622	DQ51	656	FZ5
	555	DN1118	589	FV122	623	DQ54	657	FZ87
25	556	DN1122	590	FV131	624	DR628	658	DW181
	557	DN782	591	FV132	625	GU215	659	DW309
	558	DN793	592	FV84	626	FM481	660	DX1
	559	DN795	593	FV85	627	DT117	661	DX15
	560	DN806	594	FV95	628	DT133	662	DX19
30	561	DN809	595	FX115	629	DT139	663	DX22
	562	DN810	596	FX127	630	DT164	664	DX29
	563	DN814	597	FX154	631	DU160	665	DX3
	564	DN815	598	FY187	632	DU164	666	DX4
	565	DN823	599	FY199	633	DU166	667	FZ428

	668	FZ163	702	FZ209	736	GE89	770	GF151
	669	DY474	703	FZ254	737	DY516	771	GF179
	670	FZ139	704	FZ346	738	DY529	772	GF99
	671	FX76	705	GA82	739	DY530	773	GB261
5	672	FX65	706	GA85	740	DY538	774	GC499
	673	FX55	707	GA91	741	DY830	775	GD177
	674	DU536	708	DX299	742	DY857	776	GD7
	675	FZ534	709	DX304	743	EA17	777	GE300
	676	DU515	710	DX309	744	EA36	778	DX179
10	677	DU475	711	DX316	745	GG73	779	DY757
	678	DU462	712	DX328	746	DU544	780	EC392
	679	DU353	713	DX336	747	DU560	781	EE15
	680	DU341	714	DX354	748	DZ109	782	DU408
	681	DU306	715	DX357	749	EA105	783	DU410
15	682	DU278	716	DX359	750	EA106	784	DU416
	683	DU244	717	DX363	751	EA110	785	DU447
	684	DU238	718	DX364	752	EA123	786	DX111
	685	DU236	719	DY478	753	EA46	787	DX112
	686	DU231	720	DY497	754	EA58	788	DX123
20	687	FZ639	721	DY508	755	EA7	789	DX138
	688	GC456	722	EA89	756	EA82	790	DX146
	689	GG126	723	EA9	757	GE361	791	DX153
	690	GG129	724	EA90	758	FZ510	792	DX157
	691	GG152	725	GC52	759	GE387	793	EE4
25	692	GG170	726	GC57	760	GE410	794	FZ676
	693	GG182	727	GC585	761	GE463	795	FZ683
	694	GG217	728	GC74	762	GE466	796	GD309
	695	GG440	729	GE28	763	GE468	797	GD358
	696	GG619	730	GE41	764	GE471	798	GG543
30	697	DX279	731	GE51	765	GE524	799	FX516
	698	DX288	732	GE60	766	GE539	800	FX536
	699	DX290	733	GE68	767	GE548	801	FZ1032
	700	DX295	734	GE80	768	GE549	802	FZ1041
	701	DX298	735	GE82	769	GE99	803	FZ1072

	804	FZ781	838	DD12	872	GP304	906	EM40
	805	GA147	839	DD127	873	GP329	907	EM42
	806	GA284	840	DD177	874	GP338	908	EM58
	807	DY723	841	DD204	875	GP340	909	GF185
5	808	DY737	842	DD207	876	GQ13	910	GF187
	809	DY739	843	DD211	877	GQ18	911	GF196
	810	EC399	844	DD217	878	GQ22	912	GF197
	811	EM254	845	DD504	879	GQ38	913	GF207
	812	FX194	846	DD509	880	GQ40	914	GF209
10	813	FX234	847	DD518	881	GQ56	915	GF212
	814	FX281	848	DD537	882	GQ6	916	GF218
	815	FX317	849	DD541	883	DD312	917	GF221
	816	FX353	850	DD71	884	DD352	918	GF222
	817	FX395	851	DH941	885	EK145	919	GF250
15	818	GA293	852	DQ194	886	EK208	920	GF255
	819	GA321	853	DQ204	887	EK223	921	GF256
	820	GA327	854	DQ215	888	EK234	922	GI28
	821	GB160	855	DQ216	889	EK480	923	GI3
	822	GA132	856	EK423	890	EK491	924	GI30
20	823	GA135	857	EK424	891	EK499	925	GI51
	824	GA205	858	EK450	892	EK571	926	GI63
	825	GB814	859	EL15	893	EK578	927	GI7
	826	GF87	860	DD285	894	EK581	928	GI74
	827	GG687	861	EK598	895	EK591	929	GI88
25	828	GG692	862	EK622	896	DD215	930	GI9
	829	GG694	863	EK626	897	EK634	931	DY874
	830	GG702	864	EK649	898	EL358	932	DY886
	831	GG705	865	GO653	899	EL360	933	DY900
	832	GP23	866	GP107	900	EL387	934	EM358
30	833	GP56	867	GP123	901	EL391	935	EM381
	834	GP61	868	GP168	902	EM111	936	EM386
	835	GP65	869	GP232	903	EM112	937	EM388
	836	DD115	870	GP274	904	EM12	938	EM396
	837	DD119	871	GP297	905	EM125	939	EM397

	940	EM401	974	GT43	1008	HU212	1042	EY290
	941	EM406	975	GT6	1009	HU141	1043	EY304
	942	EM408	976	HR712	1010	HS555	1044	EY313
	943	EM409	977	HR704	1011	HR95	1045	FK295
5	944	EM423	978	HR693	1012	HR906	1046	FK301
	945	EM424	979	HR628	1013	HR76	1047	FK317
	946	FE196	980	HR605	1014	HR753	1048	FK328
	947	FE204	981	EK341	1015	HR731	1049	FK349
	948	FE205	982	EK390	1016	EN116	1050	FK350
10	949	FE207	983	EN108	1017	EM341	1051	FK354
	950	FE215	984	FK235	1018	FJ283	1052	FK365
	951	FE222	985	GK428	1019	FJ307	1053	FQ105
	952	FE227	986	GT56	1020	FJ70	1054	FQ239
	953	FE228	987	FQ562	1021	FM176	1055	FQ360
15	954	FE248	988	FQ605	1022	FM197	1056	FQ45
	955	FE263	989	FQ608	1023	FM205	1057	GU353
	956	FE271	990	FQ609	1024	FM208	1058	GX167
	957	GF296	991	FQ612	1025	FM229	1059	GX183
	958	GN38	992	FS49	1026	FQ419	1060	GX208
20	959	GN45	993	FS87	1027	GX48	1061	GX210
	960	GN60	994	GM101	1028	GX5	1062	FM369
	961	GN68	995	GM103	1029	GX92	1063	FM375
	962	GN82	996	GM114	1030	FM289	1064	FM389
	963	GR286	997	GM129	1031	FM290	1065	FM432
25	964	EN10	998	GM153	1032	FM296	1066	FM459
	965	EN37	999	GM158	1033	FM300	1067	FM462
	966	FK127	1000	GM196	1034	FM312	1068	FM479
	967	FK151	1001	GM243	1035	GU512	1069	GX301
	968	GS26	1002	GM259	1036	GU534	1070	GX336
30	969	GS4	1003	GM266	1037	GU608	1071	GX354
	970	EV391	1004	HV38	1038	GX159	1072	GX361
	971	FG535	1005	HV23	1039	GX97	1073	GX403
	972	FG852	1006	HV199	1040	EW304	1074	GX408
	973	GT28	1007	HV181	1041	EY281	1075	GX418

	1076	GU830	1110	GG3	1144	GN97	1178	HE91
	1077	GU925	1111	HA510	1145	HB443	1179	HF289
	1078	GU940	1112	HA422	1146	HC324	1180	HG444
	1079	GX1031	1113	HA382	1147	HC327	1181	HF137
5	1080	GX496	1114	HA360	1148	HC505	1182	HD706
	1081	GX504	1115	HA249	1149	HC724	1183	HG710
	1082	GX509	1116	HA199	1150	HA1054	1184	HG733
	1083	GX536	1117	HA192	1151	HB1041	1185	HG775
	1084	GX540	1118	GZ568	1152	HB746	1186	HI222
10	1085	GX645	1119	GY520	1153	HB752	1187	HI39
	1086	GX700	1120	GY515	1154	HB975	1188	HH215
	1087	GX730	1121	GY330	1155	HC705	1189	HH357
	1088	GX750	1122	GY307	1156	HA791	1190	HH372
	1089	GX753	1123	HA81	1157	HC1002	1191	HH378
15	1090	GX760	1124	HA73	1158	HC1071	1192	HH390
	1091	GX814	1125	HA29	1159	HC1089	1193	HH396
	1092	GX851	1126	HA24	1160	HC831	1194	HH404
	1093	GX909	1127	HA18	1161	HC986	1195	HH433
	1094	GY102	1128	GZ78	1162	GY72	1196	HI2
20	1095	GY105	1129	GZ70	1163	HG159	1197	HH544
	1096	GY138	1130	GZ7	1164	HG620	1198	HH608
	1097	GY211	1131	GZ496	1165	HD161	1199	HH612
	1098	GX1082	1132	GZ495	1166	HD353	1200	HH625
	1099	GX1108	1133	GZ485	1167	HD378	1201	HH640
25	1100	GX1140	1134	GZ436	1168	HD417	1202	HH648
	1101	GX1165	1135	GZ420	1169	HD427	1203	HH691
	1102	GX576	1136	GZ378	1170	HD434	1204	HJ120
	1103	GX595	1137	GZ37	1171	HD499	1205	HJ140
	1104	GX606	1138	GY558	1172	HD569	1206	HJ181
30	1105	GX619	1139	GG894	1173	HD627	1207	HJ184
	1106	GG874	1140	GG907	1174	HD648	1208	HJ22
	1107	GG858	1141	GN114	1175	HE111	1209	HJ253
	1108	GG836	1142	GN115	1176	HE142	1210	HJ265
	1109	GG8	1143	GN145	1177	HE178	1211	HJ362

	1212	HJ395	1246	HM372	1280	HO722	1314	HT166
	1213	HJ411	1247	HM380	1281	HO799	1315	HT176
	1214	HJ444	1248	HM422	1282	HO801	1316	HT193
	1215	HJ65	1249	HM444	1283	HO817	1317	HT43
5	1216	HJ674	1250	HM497	1284	HO82	1318	HT81
	1217	HJ705	1251	HM544	1285	HK719	1319	HW149
	1218	HJ81	1252	HM643	1286	HO1077	1320	HW152
	1219	HJ862	1253	HN72	1287	HO1080	1321	HW190
	1220	HJ949	1254	HN78	1288	HO1087	1322	HW204
10	1221	HK10	1255	HO107	1289	HO1143	1323	HW221
	1222	HK26	1256	HO237	1290	HO1176	1324	HW243
	1223	HK60	1257	HO266	1291	HO1183	1325	HW261
	1224	HJ1037	1258	HO277	1292	HO1216	1326	HW368
	1225	HJ968	1259	HO283	1293	HO1271	1327	HW74
15	1226	HJ981	1260	HO292	1294	HO1329	1328	HX10
	1227	HJ994	1261	HO294	1295	HO1434	1329	HX102
	1228	HJ995	1262	HO305	1296	HO1441	1330	HX110
	1229	HK189	1263	HO315	1297	HO1453	1331	HX113
	1230	HK234	1264	HO332	1298	HO854	1332	HX155
20	1231	HK650	1265	HO358	1299	HO868	1333	HX188
	1232	HK658	1266	HO476	1300	HP262	1334	HX29
	1233	HK669	1267	HO481	1301	HQ36	1335	HX50
	1234	HK713	1268	HO502	1302	HQ72	1336	HY13
	1235	HK899	1269	HO54	1303	GM16	1337	HY3
25	1236	HE187	1270	HO60	1304	GM286	1338	HY55
	1237	HK162	1271	HO600	1305	GM295	1339	HY57
	1238	HL25	1272	HO617	1306	GM335	1340	HZ15
	1239	HL380	1273	HO640	1307	GM365	1341	HZ8
	1240	HL73	1274	HO663	1308	HR397	1342	IA1
30	1241	HM50	1275	HO688	1309	HR560	1343	IA21
	1242	HM54	1276	HO692	1310	HR593	1344	IA32
	1243	HM91	1277	HO693	1311	HR598	1345	IA36
	1244	HM236	1278	HO703	1312	HT13	1346	IB2
	1245	HM280	1279	HO717	1313	HT137	1347	IC2

	1348	IC9	1382	IA167	1413	HW786	1447	IE362
	1349	HY229	1383	IA183	1414	HW810	1448	IH32
	1350	HY244	1384	IA188	1415	HW846	1449	II113
	1351	HY344	1385	IA200	1416	HW849	1450	IJ101
5	1352	HY370	1386	IA220	1417	IB15	1451	IJ163
	1353	HY374	1387	IA64	1418	IB19	1452	IJ167
	1354	HY404	1388	IA69	1419	IB22	1453	IF28
	1355	HY419	1389	IA86	1420	IB28	1454	IF376
	1356	HY435	1390	HW936	1421	IB36	1455	IF456
10	1357	HZ103	1391		1422	IB49	1456	IF87
	1358	HZ109	HW1017		1423	IC103	1457	IJ1201
	1359	HZ111	1392		1424	IC126	1458	IJ1220
	1360	HZ115	HW1044		1425	IC132	1459	IJ1237
	1361	HZ71	1393		1426	IC142	1460	IJ1240
15	1362	HZ76	HW1059		1427	IC155	1461	IJ1247
	1363	HZ88	1394	HW430	1428	IC54	1462	IJ1287
	1364	HW115	1395	HW432	1429	IC87	1463	IJ1292
	1365	HW128	1396	HW440	1430	IC92	1464	IJ1299
	1366	HW477	1397	HW456	1431	IE146	1465	IJ583
20	1367	HW483	1398	HW518	1432	IE147	1466	IJ592
	1368	HW491	1399	HW591	1433	IE149	1467	IJ597
	1369	HW499	1400	HW598	1434	IE169	1468	IJ629
	1370	HW507	1401	HW627	1435	IZ6	1469	IJ638
	1371	HZ116	1402	HW646	1436	JE33	1470	IJ640
25	1372	HZ162	1403	HW649	1437	JE44	1471	IJ642
	1373	HZ185	1404	HW693	1438	JE52	1472	IJ686
	1374	HZ201	1405	HW695	1439	IE10	1473	IG25
	1375	HZ224	1406	HW697	1440	IE47	1474	IG35
	1376	HZ262	1407	HW711	1441	IE73	1475	IH40
30	1377	IA106	1408	HW715	1442	JA37	1476	IH54
	1378	IA110	1409	HW730	1443	JA78	1477	IJ288
	1379	IA114	1410	HW732	1444	JB12	1478	IJ76
	1380	IA153	1411	HW741	1445	JB23	1479	IF292
	1381	IA157	1412	HW750	1446	IE352	1480	IF513

	1481	IF548	1515	IQ58
	1482	IJ1043	1516	IS488
	1483	IJ1048	1517	IS564
	1484	IJ1054	1518	IT23
5	1485	IJ1088	1519	IT44
	1486	IJ777		
	1487	IJ887		
	1488	IJ907		
	1489	IJ928		
10	1490	IJ942		
	1491	IL1		
	1492	IL100		
	1493	IL112		
	1494	IL28		
15	1495	IK11		
	1496	IK14		
	1497	IK20		
	1498	IK203		
	1499	IK209		
20	1500	IK212		
	1501	IK343		
	1502	IK73		
	1503	IO134		
	1504	IO138		
25	1505	IO151		
	1506	IO202		
	1507	IO209		
	1508	IO31		
	1509	IO356		
30	1510	IO420		
	1511	IO62		
	1512	IQ15		
	1513	IQ45		
	1514	IQ55		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) ²	Hybridization Temperature and Buffer ¹	Wash Temperature and Buffer ¹
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T _D *; 1xSSC	T _D *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T _H *; 4xSSC	T _H *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T _J *; 4xSSC	T _J *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T _L *; 2xSSC	T _L *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T _R *; 4xSSC	T _R *; 4xSSC

[‡]: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

[†]: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

*T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. ~~The isolated~~

polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* 185, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

5 A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from in vitro culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

10 Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any
15 bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

20 The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, e.g., Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art,
25 as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting
30 expressed protein may then be purified from such culture (i.e., from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligand. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto, 1994; and Measurement of mouse and human Interferon γ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto, 1994.

Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto, 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.

- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this manner prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Herrmann et al., Proc. Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Herrmann et al., Proc. Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J. Immunol. 137:3494-3500, 1986; Bowman et al., J. Virology 61:1992-1998; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnoli et al., Cellular Immunology 133:327-341, 1991; Brown et al., J. Immunol. 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, J. Immunol. 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad. Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet
5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post
10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15 Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al.,
20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic*
25 *Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994;
30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10 A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or
5 progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural
10 cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized
15 neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from
20 chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

25 It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of
30 fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,
20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al.
30 J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborget al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

20 Tumor Inhibition Activity

In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

30

Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides, 10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient, 20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

 In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a 25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either 30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous
5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

20 When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical
25 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,
30 antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem.Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance, and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1or2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	PeripheralBloodMononuclearCell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	SalivaryGland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	PeripheralBloodMononuclearCell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

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 - (D) STATE: Massachusetts
 - (E) COUNTRY: U.S.A
 - (F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy Disk
 - (B) COMPUTER: IBM PC Compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
 - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Brown, Scott A.
 - (B) REGISTRATION NUMBER: 32,724
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (617) 498-8224
 - (B) TELEFAX: (617) 876-5851

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GGAGATGTTG AGGTGGCTGC TGACCTTGGG TCTCATCTCC TTGATTTTCT TTATCTTCTT	60
CATTGCCGTC CTCTCTAGGC TGTCTTTGGC GAGGAGGGCC CCTGCGGAAT CGTGGTCTAT	120
ATCCCGGATA CATATTCTGC CTCCTGGTC TACCTGTTC TCCTGCACCC TGGTTGTCAG	180
CACCCTCCAT CACTTCTCCC TGCACAGGAG GGTGGAATA CTGTGGTCGA CGCCCATAGG	240

GTCTCCGCAT GTAGTAAGGT GGGAACCTTC GCCTGCGGTA GGGCCGCGT TGTGGGCCT	300
GGCCTTCGGG AGCACTCTCC GATCCCTCGT TCTTTTCCCC ACTCTCACTA TTCTGGTAAT	360
TTTGCTGGTA ATTGCGTGA GGAGAACAGG TAGACTCGAG	400

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 165 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTAGTTG CCAGCACTTT AAAAATTGGT ATAGTTCACA TAAATATTCT GAATTCAGGC	60
TTTTGGAAAA GTTGTGGACC CAAGAATACT AGGCCGCGAT TTTCTTACGT CAACATTCTT	120
TCCAGGATGA TGAATGGACT GTTCTCTTTG GCCCCCTATC TCGAG	165

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GAATTCTAGA CCTTCCTCTC CTACTCCCTT CCTTAGGCTC CTGAACTCGT TTGCTCCTAA	60
ATCTTGTTAA TTCTTTTCT CTGGATTTTG GTTCTTTTG GCTTCCCTT GCCTTCCCCT	120
TTCTCTGTCT CCAACACTCT TCCCCATGT CTTTCTGGCT GTCTCTATGT TCCTCTTCTC	180
TTATCCTCAA CTTTCTGTCC ATTCGGGCCT CCTCCCACC TCCCAGCCC CAGCCCCTCC	240
CTCCTTGGTC TCCTTTTCGA TATGCCAAAC CAATTTTGGG TCGAGTGCAT TCCCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GCGATTGAAT TCTAGACCTG CCTGGATTGC CTTCTGTTGT GGTAGACAAA TCACCATTAA	60
ATGACTAAGT TTCACTGTTT TATGTGTTAA TGATCCTTAA TAACAAAAAG TTTTAAAGTC	120
TTAATTTTGT AAGATTATGT AAAGGTTAAG AAAGAAATTT TAAGTGAAAA TGATAAAACC	180
AAGCAAATGT TTATTAGTTC AATTGTTTTT CTTTTATCT TGCAGCAACG CACATCTCGA	240
G	241

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GAATTCGGCC	TTCATGGCCT	AGGAAATGAC	TTTATTGTGG	TTGAATTAGT	TAAAGGGTAC	60
TTACATTACG	TGTTTGATTT	GGGAAATGGT	GCTAACCTCA	TCAAAGGAAG	CTCAAATAAA	120
CCTCTCAATG	ACAATCAGTG	GCACAACGTG	ATGATATCAA	GGGACACCAG	CAACCTCCAC	180
ACTGTAAAGA	TTGACACAAA	AATCACAACG	CAAATCACCG	CCGGAGCCAG	GAACCTTAGAC	240
CTCAAGAGTG	ACTTATATAT	AGGAGGAGTA	GCTAAAGAAA	CATACAAATC	CTTACCAAAA	300
CTTGTCATG	CCAAAGAAGG	CTTCAAGGC	TGCCTGGCAT	CAGTTGATTT	AAATGGACGG	360
CTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GAATTCGGCC	TTCATGGCCT	ATAAAATTTA	AAAATGCTAA	GGATCTGGCC	CCACAGGCCC	60
CAAAGCTTTC	ACAGAGCTCC	TCTTAGACAT	GAAGATGCCC	ATTGGCCTCC	TAGGTCCAG	120
GAGGTGTGGG	CAGGACTGCC	CTTCTCCGT	TCTCATTGCG	GGGCTCCTGA	AGGGGTATC	180
TGAAAGTATG	TAAATCTGAT	GGGAGGTCTG	ATCCTCCTTT	TGCTAGCCCC	TGAACCTGT	240
GGTGGAGTCT	GGCTGATGGC	CAGGGCCATG	TCCTAGAGGG	GACTCCCCTG	CAGGAGGCGG	300
GCTCTAAAGG	GAGTGGTGTC	CCTTTAGGCC	AGGGTTCACA	GTGCGGGTGG	TCTGGAGACT	360
GCAGGACTCA	GGGCTGGGG	GTGGCATCAG	TCTGGCCAGG	CCCTGCGTCA	CTTGACCCCA	420
CTGTCTCGAG						430

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GGGTGGCTCA	TGCCTGTAAT	CCCGGCACTT	GGGTAGGCCA	GGGCAGCAGG	ATCGCTTGAG	60
CCCGGGAGTT	CGAGACAGCC	TGGGCAACAT	GGTGAGACCC	TGTCTCCATA	AAATTTTITA	120
AAAAATTGCC	AGGTGTGGTC	GTGTGTGCCT	GTGAGGCTGA	GGTGGGAGGC	TCGCTTGAGC	180
CCAGGGGTCA	AGGCTGCAGT	GAGCCATGAC	TGCACGCCAC	TGCACTCCAG	CGTGGGTGAC	240
AGAGTGAGAT	ACTGTATAAA	AAAAAAAAGC	TAAAACAAAA	CAAGAAGTAT	TATCTTAAGC	300
ATGTTATTTA	GAAATATGGA	GATAAATAAA	AATAACTGAA	AGTAGGTCGT	TGCTTCTGAG	360
GAGAGAAATT	GGGAGTTGGC	AAGGTCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```

GCTTTTGGAG CTGCTAAAT GCCGATTAC CTCGGTGCCG ATCAGCGGAA GACCAAAGAG      60
GATGAGAAGG ACGACAAGCC CATCCGAGCT CTGGATGAGG GGGATATTGC CTTGTTGAAA      120
ACTTATGGTC AGAGCACTTA CTCTAGGCAG ATCAAGCAAG TTGAAGATGA CATTTCAGCAA      180
CTTCTCAAGA AAATTAATGA GCTCACTGGT ATTAAAGAAT CTGACACTGG CCTGGCCCCA      240
CCAGCACTCT GGGATTGGC TGCAGATAAG CAGACACTCC AGAGTGAACA GCCTTTACAG      300
GTTGCCAGGT GTACAAAGAT AATCAATGCT GATTCGGAGG ACCCACTCGA G      351

```

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```

GTGATGTGTC ACCCCAAGTG CTCCACGTGC TTGCCAGCCA CCTGCGGCTT GCCTGCTGAA      60
TATGCCACAC ACTTCACCGA GGCCTTCTGC CGTGACAAAA TGAAGTCCCC AGGTCTCCAG      120
ACCAAGGAGC CCAGCAGCAG CTTGCACCTG GAAGGGTGGA TGAAGGTGCC CAGGAATAAC      180
AAACGAGGAC AGCAAGGCTG GGACAGGAAG TACATTGTCC TGGAGGGATC AAAAGTCCCTC      240
ATTTATGACA ATGAAGCCAG AGAAGCTGGA CAGAGGCCCG TGAAGAATT TGAGCTGTGC      300
CTTCCCAGCG GGGATGTATC TATTCATGGT GCCGTTGGTG CTTCCAAACT CGAG      354

```

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

```

GAATTCGGCC TTCATGGNCT AGGAGGAGGA AGAGGAGTAC GAGGATGACG AGGGAGGAGG      60
GGGAAGACGA GGAGGAGGAG GAGGCTGCGG CAGAGGCTGC CGCGGGGGCC AAACATGACG      120
ATGCCCCACG CGAGATGCCT GATGACGCCA AGAAGTAAGG GGGGCAGAGA TGGATGAAGA      180
GAAAGCCAC GAAGAAAAAA GCCTGGTTT GTTTTCCCA GAATATCGAT GGAATTAAAA      240
AGGCTCAGGT TTTTGACCAA AATACATGT GAATTTATTC TGACATTCCT AAAATAGATT      300
AAATTAAAGC AATTAGATCC TGGCCAGCTC GATTCAAATT TGACTTTTCAT TTTGAACATA      360
ATAAATATAT CAAAAGGTGT TAAAGAAAAC TGAATTAAAC CAAAATTAT GTTTTCATGG      420
TCTCTCCTCG AG      432

```

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

```

CTATTTTACA TGCCACCAG CATTGTATGG GGCTTCTCAC TTGTCCACAT GCTTGCCTGT      60
GTCATATTTG ACTTAAAGCT TATTTTGACG GGAAACCAAT TTGTCCTTTT TTTGGAAAGG      120
GATGGCACCA CAGATGTGAC GCGGACAATG CATTTTGGGA CCCCTACAGC CTACGAGAAG      180
GAATGCTTCA CATATGTCCT CAAGGGCCAC ATAGCTGTGA GTGCAGCCGT TTTCCCGACT      240
GGAACCAAAG GTCACCTTCT TGA CTCTCTT GCGGTTTCAG CTTTATGGGA TTCAGGCCTA      300
GATTACTTGC ACGGGACTGG ACATGGTGTT GGGTCTTTT TGAATGTCCA TGAAGGTCCT      360
TGCGGCATCA GTTACAAAC ATTCTCTGAT GAGCCCTTGG AGGCAGGCAT GATTGTCACT      420
GATGAGCCCG GGTACTATGA AGATGGGGCT TTGGAATTC GCATTGAGAA TGTGTCTCTT      480
GTGGTTCCTG TGAAGACCAA GTATAATTTT AATAACCGGG GAAGCCTGAC CTTTGAACCT      540
CTAACATTGG TTCCAATTCA GACCAAAATG ATAGATGTGG ATTCTCTTAC AGACAAAGAG      600
TGCGACTGGC TCAACAATTA CCACCTGACC TGCAGGGATG TGATTGGGAA GGAATTGCAG      660
AAACAGGGCC GCCAGGAAGC TCTCGAG                                     687

```

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

```

GAATTCGGCC TTCATGGCCT AGTCGGTGGG TGCCTGTAGT CCCAGCTACT TGGGAGGCTG      60
AGGGAGGAGA ACTGCTTGAA CCCGGGAGGC AGAGGTTGCA GTGAGCCGAG ATTGTGCCAC      120
TGTA CTCCAG CCTGGGCCAC AAAGCAAGAA TCTGTCTCAA AAAAAAAAAA AAGAAAAGAA      180
AAGAATAAAT TTCTTTTCCC CTTGAAGAAG TTGATTAGG CACAGACTCT GGACTCTGGA      240
TTCCCAACAA TGTCTTATCT AGTCAACTCA AGTATCTGGA CTACAATTTT CTTGAAAGCA      300
AAGCCCATAT ATTAATAATC TTTACTTGTA TATAAATATT CAATAAATCA TTAAGTAAAT      360
TGTTAGAAGA ATTTTATGCT CAATAAGATC CACCCGATCA TGCATTGAA AATTCTCGAG      420

```

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GAATTCGGCC TTCATGGCCT AGCACATACT CTGCTTTTCT GTCAACATCC CATTTTGGGG      60
AAAGGAAAAG TCATATTTAT TCCTGCACCC CAGTTTTTTA ACTTGTCTC CCAGTTGTCC      120
CCCTCTTCTC TGGGTGTAAG AAGGGAAAT GGAAAAAAA TTATATATAT ATTCTCTTT      180
TAATGGTGGG GGGCTACTGG AGAGGAGAGA CAGCAAGTCC ACCCTAAGT GTTACACAGC      240

```


ACATACCACA GGTTCCTGGAA TTCTCATCTT CGAACCTAGA GAAATAGGTG CTATAAACAG	300
GGAATTAAGC AAAATGCTGG ATGCTATAGA TCTTTTAATT GTCTTAATTT TTTTCTATT	360
ATTAAACAAC AGGCTCGAG	379

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GTTCATGGCC TACGGAAAGT CAGCATGGAT AACAGACTGA TGGAACTCTT TCCTGCCAAT	60
AAGCAAAGTG TTGAACACTT CACAAAATAT TTTACTGAGG CAGGCTTGAA AGAGCTTTCA	120
GAATATGATC GGAATCAGCA AACCATCGGA GCTCGTAAGG AGCTCCAGAA AGAACTTCAA	180
GAACAGATGT CCCGTGGTGA TCCATTTAAG GATATAATTT TATATGTCTA GGAGGAGATG	240
AAAAAAAACA ACATCCCAGA GCCAGTTGTC ATCGGAATAG TCTGGTCAAG TGTAAATGAGC	300
ACTGTGGAAT GGAACAAAAA AGAGGAGCTT GTAGCAGAGC AAGCCATCAA GCACCTGAAG	360
CAATACAGCC CTCTACTTGC TGCCTTTACT ACTCAAGGTC AGTCTGAGCT GACTCTGTTA	420
CTGAAGATTG AGGAGTATTG CTATGACAAC ATTCATTTC TGAAGGCCTT CCAGAAAATA	480
GTGGTGCTTT TTTATAAAGC TGAAGTCCTG AGCGAGGATG CCCTCGAG	528

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GAATTCGGCC TTCATGGCCT AGCCCAGGCC ACGCTACACT CTGCCCACAC TGGTGAGCAG	60
GAGGTCTTCC CACGCCCTGT CATTAGGCTG CATTCTACTCT TGCTAAATAA AAGTGGGAGT	120
GGGGCGTGCG CGTTATCCAT GTATTGCCTT TCAGCTCTAG ATCCCCCTCC CCTGCCTGCT	180
CTGCAGTCGT GGGTGGGGCC CGTGCGCCGT TTCTCCTTGG TAGCGTGCAC GGTGTTGAAC	240
TGGGACACTG GGGAGAAAGG GGCTTTCATG TCGTTTCCTT CCTGCTCCTG CTGCACAGCT	300
GCCAGGAGTG CTCTGCCTGG AGTCTGCAGA CCTCAGAGAG GTCCCAGCAC TGGCTGTGGC	360
CTTTCAGGTG TAGGCAGGTG GGCTCTGCTT CCCGATTCCC TGTGAGCGCC CACCCTCTCG	420
AAAGAATTTT CTGCTTGCCC TGTGACTGTG CAGACTCTGG CTCGAG	466

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

```

GAATTCGGCC TTCATGGCCT AGCGTGATCC TGGAACGTGC TCTAGTTCGA GAGAGTGAGG      60
GCTTTGAGGA GCATGTACCA TCTGATAACT CTTGAAGATA CAGAGAGAAA TCCATCTTTT      120
CCCAGGTCTC CTTCACTGAA AACAAAAATC TACTTACATA CACTGTCACC TTAGCATCAG      180
AGTCGGATTA ATGAACTGCG GAACAAGAGG TTGTGAGAAT CTAAGATGGA ACCTTTCTTT      240
CTTTCTTTCT TTTTTTTTAA ATTTTGTATT TTCCATCCAA CACTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

```

GAATTCGGCC TTCATGGCCT AGGGCTCTGC TTATAAACTT CAAAGTTACA CTGAAGGATA      60
CGGTAAAAAC ACCAGTTTAG TAACCATTIT TATGATTTGG AATACCATGA TGGGAACATC      120
TATACTAAGC ATTCCTTGGG GCATAAAACA GGCTGGATTT ACTACTGGAA TGTGTGTCAT      180
CATACTGATG GGCCTTTTAA CACTTTATTG CTGCTACAGA GTAGTGAAAT CACGGACTAT      240
GATGTTTTCA TTGGATACCA CTACCTGGGA ATATCCAGAT GTCTGCAGAC ATTATTTCCG      300
CTCCTTTGGG CAGTGGTCGA GTCTCTCTTT CTCCTTGGTG TCTCTCATTG GAGCAATGAT      360
AGTTTATTGG GTGCTTATGT CAAATTTTCT TTTTAATACT GGAAAGTTTA TTTTAAATTT      420
TATTCATCAC ATTAATGACA CAGACACTAT ACTGAGTACC AATAATAGCA ACCCTGGTCT      480
CGAG      484

```

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

```

GAATTGGCCT TCATGGCCTA GGAGATATAC CTAATGCTAG ATGATGAGTT AGTGGGTGCA      60
GCGCACCAGC GTGGCACATG TATACATATG TAACTAACCT GCACAATGTG CACATGTACC      120
CTAAAACTTA AAGTATATAT AAAAAAAAAA GACNTCGCTA GTGAGCACGC TGTATACGAC      180
ATCGCTAATG AGGACACCAT ACAAGGCATC GCTAACGATG ACGCTGTACA CAACATCACT      240
AATGATGACA CCGTATAAGA CATCGCTAAT TATGACGCTG TATACGACAT CGCTAATGAC      300
ACCGTACGAG GCACGCTAAC AAGGATGCTG TACACAACAT CGCTAATGAG GACAGTGTAC      360
AAGCCATCGC TAATGAGGAC ACTGTATATG ACATTGCTAA CGAGGACACT GTACAAGGCA      420
TTGCTAACGA GGACGCTGTA CACAACATCG CTAATGACAC CATATAAGAC ATCACCAATG      480
AGGATGCTGT ATATGACATC GCTAATAACA CCGCTCGAG      519

```

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GCAGCTCTCA	TCCTCGTCTC	CCCAACACCA	TAACGTCCTC	ATCCCGCCTC	CAACCCACAC	60
CAGGCCGAAG	CCCTCAGAGA	GTGTTTTTCAT	CAGGAACCAC	TCTCGAACCT	GAAGGTTGAC	120
TTTAGCGTTT	AGCAACCCAG	GGCGGTGTGT	GTGTTTCCCG	TTTGTTTTTC	TGAGTGGTAG	180
CAGTGATCAC	CGTAATTCCA	TGTAGCCATG	TGCTAGCAGA	ACCCCTGTGT	CCTCACCCTG	240
GCCCGTGTGA	CCCCAGCCGA	CGAGTGCCCG	GCGGAGTCCC	CGCTGCCTTC	CCATGGTCCA	300
GTGAGCTGCC	AGGGCATCAC	ATGACTCTCA	GCTGGGCTCG	AG		342

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

GAATTCTGGCC	TTCATGGCCT	AGAGCAGCTC	TGAGGTAGAA	ATTACAACGA	TGAAAAGAGC	60
ACAACGTACA	AAACCAAGAA	AGAGTCTGTT	GTGTGAAGGG	TCATTTCGATG	AAGAAGCTTC	120
TGCACAGTCC	TTTCAGGAAG	TGTTAAGTCA	ATGGAGAACC	GGAAATCATG	ATGACAACAA	180
GAAACAGAAT	TTACATGCAG	CAGTAAAAGA	CTCATTGGAA	GAATGCGAAG	TACAGACTAA	240
TCTGAAAATT	TGGAGAGAAC	CACCTTAATAT	TGAACCTTAA	GAAGACATTC	TATCCTATAT	300
GGAAAAATTA	TGGCTTAAAA	AACACAGGAG	AACCTCCACAA	GAGCAACTTT	TTAAAAATGCT	360
ACCAGATACG	TTCCACATC	CACATGAAAC	CACTGGTGAT	GCACAGTGTT	CTCAAAATGA	420
AAACGATGAA	GATAGTGATG	GTGAGGAGAC	CAAAGTACAA	CACACAGCTC	TTTATTGGCC	480
AGTAGAAACA	TTAAACATAG	AGAGACCTGA	ACCATCTCTA	AAGATAGTCG	AACTGGATGA	540
TACTTATGAA	GAGGAATTG	AAGAAGCAGA	ACATCTCGAG			580

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

GAATTCGGCC	TTCATGGCCT	AGAAAGATCT	AATTATCATG	GACCTGCGAC	AGTTTCTTAT	60
GTGCCTGTCC	CTGTGCACAG	CCTTTGCCTT	GAGCAAACCC	ACAGAAAAGA	AGGACCGTGT	120
ACATCATGAG	CCTCAGCTCA	GTGACAAGGT	TCACAATGAT	GCTCAGAGTT	TTGATTATGA	180
CCATGATGCC	TTCTTGGGTG	CTGAAGAAGC	AAAGACCTTT	GATCAGTTGA	CACCAGAAGA	240
GAGCAAGGAA	AGGTTTGGAA	AGATTGTAAG	TAAAATAGAT	GCGACAAGG	ATCGGCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

GAATTCGGCC	TTCATGGCCT	AAAAAAAGGA	TGGTGTGTTG	AGACCAGAAG	CAGCAGCAGT	60
CCTCGACATC	AACTACAAC	TTCTTCGCA	CAGTGCATAC	CCTCTGATAT	ACTGAACCCA	120
ACGCCTATCC	TCCAGCCCC	TAAGAAGTAG	AGAGGGAGCC	TCACAACATT	CCAATTTAAT	180
CCTTCAGAAA	ATTCACTACT	CTTCAAAGTT	GTCTGTGTTT	TTGTGACAAC	GATATGACTA	240
GGTGCAAAAT	GGCTTGCAAC	TAATTAACAA	ACATAGAAGC	ATCCAACAAA	CATATACGTG	300
CACAATCTGA	GGATTTAGGG	ATGAAGCTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

GAATTCGGCC	TTCATGGCCT	ACCAGCCTGG	GCGACAGAGC	AAGACTCAGT	CTCAAAACAA	60
AACAAAACAA	AACAAAAGA	GAAGGCTATT	ATTAACATTC	GAGATAATGT	GCCAGACTGC	120
TTCCATGTAT	TTTCATTATT	CTGTCCCAA	TCTGGTGAAG	TGGGTATCTG	CACAGCTTTC	180
TCTAGATTGA	ACAACAGTA	AGGGGGCTGG	CCCTGGAGAA	AGTTACCTCC	TGCCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

GAATTCGGCC	TTCATGGCCT	ACTTTTATAT	TGTTATTTTT	GTAAAGCATC	TTTTCTTCAA	60
TTCTTGTTGG	CATTCTGGGC	CAAAATATTT	CAGGTTGTTT	CGGTGTGGAG	TTAAGAAAAG	120
CAGGCGTTTT	AGTGGAGAAA	TGGGGAACAG	CATCAAGAAA	GGCTTTTTTC	CTTTTTTCTT	180
TTTTTTTTTG	AGACAGAGTC	TTGCCCTGTC	ACCCAGGCTG	GAGTGCAATG	GTCTCGAG	238

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

GAATTCGGCC	TTCATGGCCT	AGATGGATTT	CTTAATTGAA	GTACTTTTAT	AATCACAGTG	60
------------	------------	------------	------------	------------	------------	----

```

ACTGAACAAA ATATTTTCAA AGACATTGT CATTCCTTAA AGCCAAGATT TTAAAGACTA      120
ATGTCCTTCC TGAGGGTTAC TTTACTATAC TGTGTATGGT GTATAGCCAC AGAAAGTCAG      180
TCTGATAAAT TTTCAATGTG TAAGTGTGAT GCATTCAACC CAGATCTCGA G              231

```

(2) INFORMATION FOR SEQ ID NO:26:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

```

GAATTCGGCC TTCATGGCCT ACACAGAGTA TATTTATAGC TATCTCAGGG TCCTTGTCCTA      60
ATTGTCTGTG TCATTCTTTC ATCTGCTTCT ACTGATTTTT TCTGCTTCTG TTTACTCTTC      120
ATTTTGGACC TATTTCCCTT TATTTGGTGC TTTGCATACA ATTTGTTGGG ACTGGATCTT      180
TGCTAGTCCT TTAAATGTTT TTAAGCTTTG TTTTGGGATG CAGTTAGGTG ACTCAGAAAC      240
AATCAGAAAC AATTGATCC TTTTATGTCT CTTAAGCTTT GTTATAGGCA GGACCAGAGC      300
TCTCGAG                                           307

```

(2) INFORMATION FOR SEQ ID NO:27:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

```

GAATTCGGCC TTCATGGCCT ACAATAATAG CCTCCACCT GGTCTTCCTT CTTCAGTCTC      60
TTCAGTCTTT CCCAAAGCTC TTGAATCCTA CATGAACCCA TGCCTCGGTC AAAATATTAC      120
AGGCTGCAGC CAATCTTCAA GTGGCATACA GGCCAAACAT CCATTTATAA TATGTTGGA      180
ATTCTAACA CATTTTATCA TAGATCTAAT GCCATACAAT AGGTGGAGGT TAGATCCTCA      240
CGCAACTCTC GAG                                           253

```

(2) INFORMATION FOR SEQ ID NO:28:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 254 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

```

GAATTCGGCC TTCATGGCCT ACAGAGAACT TGTGTTCCGG TTTATTGAAG TTCAGACACT      60
TCTCCTCGCT CCATTCTGTC CACATTGTG TGAGCACATC TGGACACTCC TGGGAAAGCC      120
TGACTCAATT ATGAATGCTT CATGGCCTGT GGCAGGTCCT GTTAATGAAG TTTAATACA      180
CTCCTCACAG TATCTTATGG AAGTAACACA TGACCTTAGA CTACGACTCA AGAATATAT      240
GATGCCAGCT CGAG                                           254

```

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

```

GAATTCGGCC TTCATGGCCT ACGAGAAGGA GTGGAAGAGT AAGCAGACTA GGAAAATACA      60
GTACAACCAT CAGGCAGCAT TACAGACCCA CTTAAGGTTT GTGGCCATGT GTGGTTGTGT      120
GGTTTTTTTT CTGGCCATGC TCAGTTACAT AGGGGCAAGT GCAAAAAAAA CCCCAGAGTT      180
TGTTTAACT AGAGCTCTGG TTTTGCCAAA C                                     211

```

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

```

GAATTCGGCC TTCATGGCCT AGGATCAGGT TCGTCCTTTA GTGTTGTGTA TGGTTATCAT      60
TTGTTTTGAG GTTAGTTTGA TTAGTCATTG TTGGGTGGTG ATTAGTCGGT TGTTGATGAG      120
ATATTTGGAG GTGGGGATCA ATATAGGGGG AAATAGAATG ATCAGTACTG CGGCGGGTAG      180
GCCTAGGATT GTGGGGGCAA TGAATGAAGC GAACAGATTT TCGTTCATTT TGGTTCTCAG      240
GGTTTGTAT AATTTTAT TTTTATGGGC TTTGGTGAGG GAAGTAGGTG GTGGAGCACA      300
GGCACTGCAG GTCAATGGAG GTGGAGTACA GGGACTACAG GTCAATGGAG GTGGAGCACA      360
GGGACTAAAG GTCAATGGAG GTGGGGCACA GGGACTACAC GTCAGTGGAG GTGGAGTCAC      420
AGGGACTACA GGTCACTGGA GGTGGAGCAC AGAGACTACA GGTCACTGGA GGTGGGGCAC      480
AGAGACTACA GGTCACTGGA GGTGGAGCAC AGAGACCACA G                                     521

```

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

```

GAATTCGGCC TTCATGGCCT AAAATTTTCCT CTAAGTACTG ATTTAGCTGC ATTGTATAAG      60
TATATGCTTC CATTTTCATT CATTTCCAAA TATTTTCTAA TTTCCTTTGC AATTTTTTTT      120
TCAGGAATTC GGCCTTGCT GTGTTGCCCA GGCTGGAGAG CAGTGCCACT ATCACAGCTC      180
ACTATAAACT CAAACTCCTG GGCTCAAGCA ACCCTCCAC CTCCCAACTC CCCTCGAC      238

```

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

```
GGTTTCTTAA AAAAAAAAAA AAAAGGAATT TGATCCAGAG CAATTTTCT CAATTAAAT      60
TTGTGATTAC ATTCTGAGT TTCCATGGCA GAGTTGTGAG TGGGGCTGTG ATATAATTTA      120
ACTTCTCCTA AATTGCTGAC ACCGATAACC CTATAAATTA ACAGATGGCG GAGGGAAATC      180
TCCTGGCTTC TTCCTGGCTA GTTTTTTTTA ATGGTCTGAT TTTTGAATA GGGGTTTGA      240
GTCCAGCCG ACTCGAG                                         257
```

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

```
GAATTCGGCC TTCATGGCCT AAAGACTTAC GTTATATTTT CATATACTCC TTCCCACTCT      60
TAGTGTGTTG TCAATATACA TTTGTTTTTC CATGTAAAAA CACCACAGTA TATTGTTCTT      120
AATTTTGCTT TTAATAGTAA ACTGTCTTAT AACAAATTAT GAAAATGGAA AAAACATGT      180
CTTCTTATT TGCCCTCATA TTTATCCATT TAGGCACTCT TCCTTTTCC CTTTCATTCC      240
AGTTTCTCGA G                                         251
```

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

```
GAATTCGGCC TTCATGGCCT ACTAACATTT ATGAAAATTA TTTGTAAATA AAATAAGAGG      60
CATTGAGATT AAAATTGGAG ATAAAGTTGC TGATGTGTTG TTTTCCTGAA GTATTTTTTT      120
TCTTAATTCT GATCTTTGTT TCCCAATACA ATCACACTCA CACCCTTGCA GTTCAGTTTC      180
CTGACGACTC TCTAGTGTGC CAGATCTGTG TTTCTATGTC AGTGATCTGT TCCCATCTC      240
TCGAG                                         245
```

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```

GAATTCGCTT CATGGCCTAC CGAGAAATGG GTGTGATTGC TGCCATGAGA GATGGTTTGG      60
GTTTCATCAA GTGTGTGGAT CGTGATGTTC GTATGTTCTT CCACTTCAGT GAAATTCTGG      120
ATGGGAACCA GCTCCATATT GCAGATGAAG TAGAGTTTAC TGTGGTTCCT GATATGCTCT      180
CTGCTCAAAG AAATCATGCT ATTAGGATTA AAAAATTCC CAAGGGCAGG GTTTCATTTC      240
ATTCCCATTC AGATCACCGT TTTCTGGGCA CGGTAGAAAA AGAAGCCACT TTTTCCAATC      300
CTAAACCAC TAGCCCAAT AAAGGCAAAG AGAAGGAGGC TGAGGATGGC ATTATTGCTT      360
ATGATGACTG TGGGGGTCTC GAG                                             383

```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

```

GAATTCGGCC TTCATGGCCT ACTGCCGCTC CTGGTGCTGC TTGTGTGCTC GTTGGTGCG      60
GACCTGGTAC CTCTTTGTG AAGCGGCAGC TGAGGAGACT CCGCGCTCG CCATGGCCGA      120
CGAAAAGCTC GAG                                             133

```

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

```

GAATTCGGCC TTCATGGCCT AAGGTAGTCT AGGCTCATCT TCATGAGGGA ACTGAGGTCT      60
TGGGGGGTGG GGGTTACCCA AATAGTTCA CAGAAGAACC AGAAATAAAA CCTGCCTTTC      120
TAGACTGTAA GTCTTGAT TGTCATCTAA ATGGTTGTCT CTATACAGCA ACTCATCTCT      180
AGAACTGAAA ATAAGTTTAA ATCCCTCTC CATCCCAAT AATTCAAGCT GCATTTGAGA      240
GAAAACCAGG ACTTTGGAAT CAGACAGCAA CTCGAG                                             276

```

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

GAATTTGTGC	TCTTAGAGTA	GGAGTTGGAA	CTATAGGACT	TGAAGGCAAG	AGCAGGTATC	60
TTATCAAGGA	TCTACTCACT	CAGTTTCCCT	AAAGCTCTCT	CTCCAGATCG	GATTCAACCG	120
CACATCATGA	CAGATGTTCC	GGCTACATTT	ACCCAGGCTG	AGTGTAAATGG	GGATAAACCA	180
CCTGAAAACG	GTCAACAAAC	AATCACTAAA	ATCAGTGAGG	AATGACTGA	TGTGGACAGC	240
CCCCTGCCAC	ACTACAGGGT	AGAACCCAGT	CTGGAAGGTG	CACTCACCAA	AGGAAGTCAG	300
GAGGAAAGAA	GAAAATTACA	AGGGAACAGA	CTCGAG			336

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

GAATTCGGCC	TTCATGGCCT	AGTCGGAGAA	GGACATCCAG	GATCTGAAGT	TTGGGGTCGA	60
GCAGGATGTT	GATATGGTGT	TTGCGTCATT	CATCCGCAAG	GCATCTGATG	TCCATGAAGT	120
TAGGAAGGTC	CTGGGAGAGA	AGGGAAGAA	CATCAAGATT	ATCAGCAAAA	TCGAGAATCA	180
TGAGGGGGTT	CGGAGGTTTG	ATGAAATCCT	GGAGGCCAGT	GATGGGATCA	TGTTGGCTCG	240
TGGTGATCTA	GGCATTGAGA	TTCTTGACAG	GAAGGTCTTC	CTTGCTCAGA	AGATGATGAT	300
TGGACGGTGC	AACCGAGCTG	GGAAGCCTGT	CATCTGTGCT	ACTCAGATGC	TGGAGAGCAT	360
GATCAAGAAG	CCCCGCCCCA	CTCGA				385

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

GAATTCGGCC	TTGCTAAAAA	AAAAAAAAAA	GAGGCAAGTA	ATGTAATATC	CCCCACCTTT	60
GGTTTTCTTA	TCTATAAATA	CTGATTAAAA	AAAAAAGTAC	ACTGTCTGCC	TTATAAGCTA	120
AAATGAGTGA	ATACAGGCAA	AATGCCTTAC	ATTTTACTTT	ACATTTACTA	AGCACCCAGA	180
AAATGTAAAC	TATGATGACA	ATTATGATGA	TGATGATATT	GATATTTTCA	AGGAGGGCGC	240
TCGAG						245

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

GAATTCGGCC	TTCATGGCCT	AAATAAAGAT	GATTTTGTG	CTTAGCAGTT	TAAGGTATAT	60
GGCTGCATAT	GCAAACTCT	TTCCCAATTC	AGTCGCTACT	TTTACTTCTG	CCCTTTCTAT	120

CCATCGTCTT CATTGTGTGT GTACAGTGCT GTGTGTAAGC TTATCAGTGT GTTTTTTTAT 180
 TTGTATCAGT CATGAAAGTC CTGTTAGGTA TCCAGAGTTC TATTTATCTA GCTGTACAGA 240
 TCTCGAG 247

(2) INFORMATION FOR SEQ ID NO:42:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GGATATGGTA ACTGAGAACC ATTTTCTAGT TGAGATAACT CATGTACAGG GGGGGTCACA 60
 TGACTCAACA ACACACAGAG CACAGAAGAG AACCAACAAT CTCGAG 106

(2) INFORMATION FOR SEQ ID NO:43:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 237 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GCGTATTTCC AAGTGTATGT ATTTCTAAAG ATAGATTTTT TAAAAACAAA AAATCTTAAT 60
 TTAGATGATA AGCGATTTTT ACCTTTTTTT TTTTTCAAA GCAACTTGAT CCTGTAAGTT 120
 TTGGCATCTT AAGTGGAAAT GTTCATGCAG TTTTGCTGGA TCTTCGCTAT GGCAGTAAAA 180
 TGCAATACAG CACTGTGGTT AAGAGTGCAG AACGGAGTCA GTCAGCCTGA ACTCGAG 237

(2) INFORMATION FOR SEQ ID NO:44:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 476 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AGGGAGTNGG 60
 TGTGTCTGTG CATTATTTG GATCATGGAA GGTGTAGAT GTGTATTTCT AACTGTAGAT 120
 AATGGAGGAC ACATATTTGG GGAGTTTGA GAGGATGTGT ATGTGTGTGT GTGTGCAGTG 180
 TGGTATTTCT CTATGTTTTG GTGGGTGGGG TATGTATCCA TCAAAATATC TCAGATTATC 240
 TGATGTAAGA AAATAATTCT GCATCTCAGT GACTTCCAAC AAGGTAGGTT TCTCATGTAT 300
 GTTATGTGTC CTCCATTGGT TGGCTTTGAT CAGTTACTGG TCCTGTGCCT TGGATCCAGA 360
 TGGATGAAGC GGCCTCATT GGGACAGGAC TAGAAGGACT TCTTCTGCTC AGAGTCATAC 420
 ATGGCATTTT TGATCACATT TCATTGCCA TAACAAGTCA TGTGGCCATA CTCGAG 476

(2) INFORMATION FOR SEQ ID NO:45:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 358 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

```
GAATTCGGCC TTCATGGCCT AGGCAAATC TGCTGGACTT AACTTCATCA ATGTAGTGGG      60
CTCTGTTTGT GGGGCCCAGG CTTTGATGAG TGGTTCAAAC CCCATGCTGG GCTGTAACAC      120
TGGTGCCATA ACTCCTGCAG GAATAAACCT GAGCGGCCTT CTACCCTCAG GAGGTCTGCT      180
ACCAAATGCA CTGCCCAGTG CAATGCAGGC AGCTTCTCAA GCAGGTGTTT CATTGTTGTT      240
AAAAAATACT TCAAGTCTCA GGCCCTTAAA TCTACTCCAG CTTCCAGGTG GTTCACTTAT      300
TTTTAACTCT CTGCAGCAGC AGCAACAGCA GCTCTCCCAG TTTACACCAC AACTCGAG      358
```

(2) INFORMATION FOR SEQ ID NO:46:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 353 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

```
GAATTCGGCC TTCATGGCCT AATCATTTTG ACTTTCAGTG CTTTCAATGA CCAAGTGGCCT      60
CCAGGGATAA AGCAACTGCT TGGTTTGAG GCGCTGCTCT GCGCTGCTGA GCCATCAGCC      120
TCCAATACGC CAATGCCCAT AGATGCTAGT TACAGCCCTG CTTCCCTCCTA CATAGGGTTC      180
TGTCACTACT GAGTCTCACC ATTTCCCTCT CCCCAGTGTC TTTATTATGT GACACACACA      240
CACGGCACTA TGTTTAAAAA AGCGTGCTCA CTGGCAACCT CTTGGCGTGT TGTGTTTCAT      300
CTGTGTTTTG TATTGGTGGT ATCTTGGGGT CGACCGAAAG AGTCAACCTC GAG              353
```

(2) INFORMATION FOR SEQ ID NO:47:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 456 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```
GAATTCGGCC TTCATGGCCT AGGAGCTAC CAGATGCTGA AGAAAGGGCC CTGGCAGACT      60
GGGTTCAAAC TCAGCCATTG TCAGCTTGGT AACCTTGACC AAGTGTCTTC CCCTCTGTGA      120
GCCTCAGTTT TCTCAATAGT AAGAGGGGAT AACACACTTA CCTCTCATAG CTGTGGACAT      180
GGAGGTGAAA GTGCCGCATA CACTGTAAAG TGTTATATAC GTGTAAGAGA AAAAATCGGG      240
CCAGAGGCTG GGCTTGTGTT AATTGATTCA GGAAATTAC CAGAGGCCCC CTAGATGCAA      300
CGTCCTTTGG GTGTCTGGCA GTGGGCACAA AGATGAACAA AACAGTGCCC CACCCTCACC      360
CCGTCAACCG TCAGTGACAG AGTGGGCTGG GTGCTTGCCT CCCACAGTGA GGAAGGCAGA      420
AGGGGTCCCT GCCCTCAAAG GAGGACGATA CTCGAG              456
```

(2) INFORMATION FOR SEQ ID NO:48:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 509 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

```

GAATTCGGCC TTCATGGCCT AGCTGCCCCG CAGCACTTAC CGGAGCGACC ATGAGGGTGA      60
CGATTGGAAG CACACACAGG CTTCCCGCCA CCTCCTTTAA ACCGCGCTG GCTTGCCAGG      120
GACAGACGGC GCGGTTGGCT CCCCAAAATT CCGACTGATA CGCGCCTCGG CGAGCGAAAG      180
CAAACGCGGG ATACTCTCGC GTTCTGATT GGCTGCAGTT GGAATTGATC ACACCTTTTC      240
AGTTGTACTT CAATCCTGAA TTAATCTTTA AACACTTTCA AATATGGAGA TTAATCACCA      300
ACTTCTTATT TTTTGGGCCA GTTGGATTCA ATTTTTTATT TAACATGATT TTTCTATATC      360
GTTACTGTCG AATGCTAGAA GAAGGCTCTT TCCGAGGTCG GACAGCAGAC TTGTATTTA      420
TGTTCTTTT TGGTGGATT TTAATGACCC TTTTGGTCT GTTGTGAGC TTAGTTTTCT      480
TGGGCCAGGC CTTTACAATA ATGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:49:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 467 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

```

GAATTCGGCC TTCATGGCCT AAAGCAAGTG ATTTTCTTTT TTTTAAAGAC AGGGTCTCAC      60
TTGGTCACCC AGGCTGGAGT ACAGTGACAT CATCAGGCT CACTGCAACC TTCGCCTCTT      120
GGGCTCAAGT GATTCCCCCA TCCCCCACC CCCTTCTCAC CCCAGATTG GACTATAGGC      180
GTGTACCACC ACGCCTGGCA GAGACCGGGT TTTGCCGTTG CCCAAGCTGA TCTCGAACTC      240
CTGAGCTCAA GCGATCTGCC CGTCTCAGCC TCCCCTAAGC AAGCATTTT AAGTTTCTAT      300
GCTGTTTAAT TTTTTTTAAC TGATTAAATT ATTTGCATTG TGTGGTCATG GAATATGTTT      360
TTATGATATT GGTGTTTGA GATTGGTGA GTCTTCTTT GTAACCTAGT TAAACCATTG      420
CATATCTTTT TAAAGGATG TATATCCTT ATCTGTTAGG GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:50:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 168 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

```

GAATTCGGCC TTCATGGCAG AGTGAAGGG GTTGTAATA TTAGGAGAGA GATAATTCTT      60
AGTGCAATTC TCTGAGGATG AAGCATGAGA TGAATCCATG GCACGAATGG AACAGCTGGG      120
GAAAGCAGGT CAGAATGGAT ATGGATATAA ATACTGTGAG TTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:51:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 228 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

GAAGTAAATT ATTACGATTT CCTTAGGTGG TTAATAAATT ACCATTATTT TCTCTATTTT	60
ACAGATCACG AAATGATAAG TAACTTACCG AAAGTTACAT TATTTAAGTT AATCAAATGT	120
TTATTGATTG CCAGACTTTT TTCTAGGCTT AAGCAAATGT TGGAAAATAC TTCTCTGAGC	180
TTTCAAAAAT GTTATTTCTA CTGTGCAGTG CTGCAGGAGT CTCTCGAG	228

(2) INFORMATION FOR SEQ ID NO:52:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GCAGAGTCAA TAGATACTTT AAATTGAAGT AAAGAATTAA AAAAGGAAGT GGATAGTTTG	60
GGTATTAGTT TAGCTAGAAA TACAAAGAAA CTTGACTTCT AGGGCAGTAC AAATTCAAGC	120
CTTCCACAAA CAAACAGTTG AGAGTATGTT TATCTTCTTA AAATGTGTGG GTGCCTTCCC	180
ACCACTTCAC CTGCTCCTCA CTGGTGCTTT GTCCCCCTCC TACTACCATT CCTGTCCCGG	240
TCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:53:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

GGCCAAAACA AAGCTTATAA AGGTTCTCTG TCCCAACGTA ATTACCTCCA ATCGGCATTT	60
AAAGACATCC GCATTGCTTA CAGCACATCC TAGCCTCATG CTTGCCCAAG GATGGACTCG	120
AAATGAACTA TTTCCAGAGC GACTTATTCA GGCATTCTGT GGAGCCTCCG TTGCCCTGTC	180
CATCACCGGA GCTTTTGTA TGCAGCTAT GCCATTGGCC TCCGGCAACC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:54:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

```

GAATTCGCCT TCGTGGCCTA AAAAGAAAAA ATCTAAGGTA GATTGTGCCT TTTGTGCCTT      60
TCCTCTGCTC AAGACCTTTC AGTGGCTTCC CACTTCACTC AGTAAAAGGC AAAAAGTCTT      120
TTTAATAACC TACAAGGCAT TATGTTACCC ACATTGTCCC TGCTCCCCTA CATTGTACTC      180
AAGTCTATGA TCTTTTACC ATTCTTGTA CAAAGGATTT TCACTGGCTG G                231

```

(2) INFORMATION FOR SEQ ID NO:55:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

```

GAATTCGGCC TTCATGGCCT AGAAATATTT TCCTACAAGA GTACTGAATT TCAGGAAATG      60
GGATAGAGCT TCTAACCAGT GTATTCCGTC AAGTAAGATA ATAACAGCTG ACCTGCCAAC      120
AGCATTACAG GGAGATTCTT TGCTCAGCTA ACACATTCTT GTTTTCAA ATTGATGCTT      180
AATTGTAGCT GTTATTCTAA TTGTGACAT GGAACCTAAT CATGCTTCAA TCCTTGATAG      240
AGCAAACTC AGAACAGGTT ATGTAAAAT ATAGTCTGGC TTTAGAATTT GTTAATTCAC      300
CTGCTTTGCC ACAGAAATG GAGACTCGAG                                330

```

(2) INFORMATION FOR SEQ ID NO:56:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 230 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

```

GAATTCTAGA CCTGCCTCGA GATCTGAAT ATAATCTTTT CCATTCTATC TAGCTCCCAT      60
CCTAAGTCCT CTCCTCCTAA CGTGGAACTC TCCTAAAATC TTCTCCTTAT ACTAGGGTTC      120
GAGACATGAG GCTGTCTTTT TGGGCCCTTT GCGTTGTAC AGTCCCAGAC CACGGAACAT      180
TCTCTCTTCC CCAGGACAGG ACATTCTCTC TTCCCCAGCG CTCCCTCGAG                230

```

(2) INFORMATION FOR SEQ ID NO:57:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 416 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

```

GAATTCGGCC TTCATGGCCT AAAGGGAAAG TGGGAATATA CACAATGCAN AACTAGCCA      60
CATGCAATCA TGGGAGAAC GAGCCTACTT AAAAATCANA CCCAAGCTTT GCTTCAGAAA      120
TAAGTGGAGT TGAACCCATT CGATCATTTA CGCATGACTT TGCAAAGGTT CTCTGGAGGG      180

```

GGAAGAGGAT CAACCTTCTC TCATACCGCA CAGCAAGGGA ACCAAAGTAA TATAAATCAC	240
TCTTAAAAAT GTCATGTTAC TTTAAGAATA AGCCATACTG CTGGCACCTA GAATATTTT	300
GTGGGTCCCC ATCTCTGGCT TTTCTTGTTT AAATGGCCCC CAGGCTAAGA GGCAGCTGCT	360
CACATCCCTG CAACAAACAT GTTCTTTCCT TTCTGCATAG CCTTCCATT CTGAG	416

(2) INFORMATION FOR SEQ ID NO:58:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

GAATTCGGCT TCATGGCCTA CTAGACCTGC TCAGTCGTTT CTAATGAATA AAAATCAAGT	60
GCCAAAGCTT CAGCCCCAGA TAACTATGAT TCCTCCTAGT GCACAACCAC CACGCACTCA	120
AACACCACCT CTGGGACAGA CACCTCAGCT TGGTCTCAA ACTAATCCAC CACTTATCCA	180
GGAAAAGCCT GCCAAGACCA GCAAAAAGCC ACCACCGTCA AAGGAAGAAC TCCTTAAACT	240
AACTGAAACT GTTGTGACTG AATATCTAAA TAGTGGAAG TCACTCGAG	289

(2) INFORMATION FOR SEQ ID NO:59:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

GAATTCGGCC TTCATGGCCT AATTGAGGC CTGGGTGGAA CTGACAGGTG GAGTTTGAAG	60
GCACATCTGC TAGCTCACAT AGGAAACAGA ATCTCCCAGG GAAAAGACAT AGGACCTCTG	120
ACTCTAATG AGGTTCTGGA TTATTATGAG AGATTTTCAG AAATGGTCTA ATGGTGTGG	180
CTTGCTCCAT ACCATAGATT TTAAGAGACA GTAGAGCTTC TGCGATGAGA TTCCCCCATA	240
AAATAATTAT GGATCTGCAC TGGCAAGCTG GTCTTGGCTC CAAAGACCAA GAGTTGGTTT	300
GTGGTGCTGA TTCTGAACCC TTGCGATGCA ACTGTCTGGT AGTAAAATGG CTTGTATGG	360
TAAGAAAGCT TTAATCCTCG AG	382

(2) INFORMATION FOR SEQ ID NO:60:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

AAAAAAAAC CAAACCCTAT TATTTTCATTG ACAGATTGTC TTAGAGTTGA TAGCATTAA	60
TAATTGAGTA AGTACAGTCC TTCCTTGTTT CCAACGTGCC CTATTTTTTC TTTCTCTCT	120
ACTTTTGCAT ATGCATTTTC CCTCTTTCTT GTTCTTGGT GAATTCCTAA ACCTTTTTTT	180
TCAAAATCAC CTCGAG	196

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

GAATTCGGCC	TTCATGGCCT	AACCACATTT	TTCTAATTAG	TGTTCTAGAC	TGGCTAGATA	60
AATCAACAAT	GAATCAACAG	TCTTTAAGCA	CATATACAGG	TATGATAACT	CTGTAGTTAA	120
CTCAAATCCT	TGTGCTATGT	ATTATTTTGC	TGCGTAACTC	AGAATTCAGG	AAGCTACCCA	180
CCCAATCAGT	CTTTAGCTGT	TTTATTTTCAG	TAACAAGTTT	ATGCAGAACC	TTCCATATCT	240
CTCATAAAAC	CAGAGCATT	C	ATAAGAACCAG	AAACTCTCGA	G	281

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

GAATTCGGCC	TTCATGGCCT	AAAAGATTTG	AGCATTTC	AAATTTTAAAC	ATAAAAGCAT	60
AAACGTAGAT	AAAATGAAGG	TGTACTATGA	TATCTTCAGT	TTTATCAGAA	ATGATGTAAA	120
AATTACAACC	TCTTTAAAAA	GTAGTGTTAA	TCATTAAGTT	AGAAAAATATA	TAGCTGGGCA	180
TGGTGGCAGA	TGCCTGTAAT	CCCAGCTACA	TGGGAAGGTG	AGGTGGGAGA	ATCGCTTGAA	240
CCCAGGCAGT	GGAGGATGCA	GTGAGCCAAG	ATCATGCCAC	TGCACCCCAG	CCTGGGTGAC	300
AGAACAAGAC	TCCATNTCAA	GGAAAAA	AAAGAAAAAT	ATATATATGA	ACTTCAGAAT	360
CTGAGGTCAT	ATATAGACAG	GTCTTCCCCC	CGTCTCGAG			400

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

GAAACCATAG	TGGCAGATTT	GTCACAAAA	GAATCTTTGT	AACCTTCCCT	TTAGATGTCC	60
TGTGTTATGG	CTTGTTTTT	CTCAAAGATC	ATAGATTGCA	GTGTTTATCT	CAACTCAGTA	120
TTTCCTTTGA	AAATTGAACT	TTTCTCTATA	TTTTCCTTTC	CCCCATGCAA	ACTTTTGTAT	180
TGTTTTTCTG	AAATCATAAT	TCATTGACT	TACCAGTTAA	TATTGATACA	GGTCTTGCAT	240
GTTATGAAGT	GCATTGTGTA	CATTATCTTG	TTAATTTTC	ACAACACTCT	TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```

GGTCGCAGAA GAGTGTGAGA ACAATCAGTT AAAGAAGCTC AAAGAAATCT GTGAGAAAGA      60
AAAGAAAGAA TTAAAGAAGA AAATGGATAA AAAGAGGCAG GAGAAGATAA CAGAAGCTAA      120
ATCCAAAGAC AAAAGTCAGA TGGAAAGAGGA GAAGACAGAG ATGATCCGGT CATATATCCA      180
GGAAGTGGTG CAGTATATCA AGAGGCTAGA AGAAGCGCAA AGTAAACGGC AAGAAAAACT      240
CGTAGAGAAA CACAAGGAAA TACGTCAGCA GATCCTGGAT GAAAAGCCCA AGGGGGAAGG      300
TTCCTCCTCA TTCTTGTCGG AAACCTGCCA TGAGGATCCC TCTGTTTCCC CCAAACCTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```

GAATTCGGCC TTCATGGCCT ACTGGGGGAA GAAGGCTGCT TTATGTTTAT TTTTCAAGAC      60
TTTAAAAATA TTTTGTGGTT GTATTGCACT AGGAAATCTC TCCCACCTCT CCCTTTTCTC      120
TTTCTTTCCC TATACAAAAT AAAAGGCCCA CCATAGAGAC TAGGCGGCCG AAAGACTAGG      180
AGGGCTGAGG AAAAGAAATA GGTCTCTGGA GGTGGAAC TA AACTGTGCA GCTGCCTCTT      240
CCTGGCGGTG GATGCTGCTT TGGGAGGGCC AGGGAGGCTG CAGGGGGACA GTGTTGGGAT      300
TGTCAGGAA AAAGGGGTAG GAAGGAAGGT GGAGGGATTG ATCTAGTACC AGGGAGAATA      360
TTCCACTGAA CTGTGATTCT ATCGGCCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```

GAATTCGGCC TTCATGGCCT AATTGTTTAT TGCTAGAAAA TACACAGTTT TGAGATTTT      60
GGGCATAATT GGCCTTAGTG TGCTACTTCT GCATTAAAT ATAGGTTAAT AATCAGATGA      120
AAGCAGCCAA TAACCTATGG CTTCTGTACT TTCTGGTGAA AGTTTTGTTA ATGTTTTTAA      180
TTTGTATTTT TCTGCTTATA AATTGTCTCT TAAATCACTC CCCTCCTTCC CGCCCCCCCG      240
ACTCCTTCTC CCTCCTTCCC GCCCCCCTCA CTCCTTCTCC CTCCTTCCC CGCCCGCGAC      300
TCCTTCTCCC TCCTTCCC GC CCCCCGATCC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```
GGTGACATAT TTATTGCTTC TGTTCCTCAA CTACATCACT TCAACTAGAA GTAAAGCTAT    60
GATTTTCCTG ACTTCACATA GGAGGCAAAT TTAGAGAAAG TTGTAAAGAT TTCTATGTTT    120
TGGGTTTTTT TTTTCCCTTT TTTTTTTTAA GAGTATAAGG TTTACACAAT CATTCTCATA    180
ATGTGACGCA AGCCAGCAAG GCCAAAAATG CTAGAGAAAA TAACGGGATC TCGAG          235
```

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```
GAATTCGGCC TTCATGGCCT ACCACAATCT GTTTGCTTTT CCTCTTTAGA TTCCAAAAAT    60
AACACCCCAA AGGCTACCTT TTCAAATATT CTACAACATC TGCAAAAATC TTTAGTACTC    120
TGTCCTTGGA GTCAGTCAAG AAATTCCACC CCAGAAGTGT AAAAACCAAT CAATAATATA    180
TGACACTGAT TTTCTCTAAA TTATTATTTT TCTTATGGTT GAGTCTCCTG CCAACTTTAT    240
GTTTCCCAAT CGGCTCG          257
```

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```
GAATTCGGCC TTCATGGCCT AGCTGGGCAT GGTGATGCAC GCCTGTAATT CTAGCTACTC    60
AGGTGGGGGG TTAAAGGTGA GGCAAGGTCA GCGGTGAAGT GCAGCTCAGA GGGAGGGGTC    120
AAACATAAAC CAGAACTTAT AGGTCTAGAG GTAAATGGG ATTCATGGGG GGAGAGGTC    180
AAAGGTGAAG CAGAAGTCAG GGTGAAGGA AGGTCTGCAA AGTTAAAGGT GCGGTTTCCA    240
GAGTCAGAAG GGTGCTCGA G          261
```

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT TTAAACACAG TCCTCTCAGA AACTGACTAA      60
AACAGGTTTT AAAATTAGCA AATATTAAGA ACATACGAGT AAAAGTCAGT TTATTTTAGA      120
TAAGTAGGGA TTAAATTCA ACAAAAATAA ACACATTTTA AACTCCTATA ATACATTTAT      180
TTAAAATAAA TATATTTTTC CAAAAGAAG TGTAAAGTTCA AAGAGTTAAC ATACAGATTA      240
TATCCTATGA GATATAATAA TATTAGAAAC TGGCTCGAG                               279

```

(2) INFORMATION FOR SEQ ID NO:71:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 255 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

```

GAATTCGGCC TTCATGGCCT AGTTACATTT ATAATCAGTG AGGAAAATAT AAACATATACA      60
ATAAATGAAA GGGTCATTGG CCAATTGTTT GGAGGGAAAA AATACACCAT GTTCTAAAAT      120
AAATTTCTAG TGATTTATTG TGACTTTTCAT GCATTTGGAT GATTTTAAAG ATTTTATATA      180
AAAATGAAAC CATAGCCTTA CGAGAAGAAA ATATAAAGAA AAACCTGTAT AGTCTTGGGA      240
GGGGGGATTC TCGAG                               255

```

(2) INFORMATION FOR SEQ ID NO:72:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 138 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

```

GCGATTGAAT TCTAGACCTG CCTCGAGATC GTCTTTTCTA CCTGGATGAG AGCTCTACCA      60
CTTCTTTTCT TTTGCACACT CATCTCATTC TATGCACTCT TGGGCTGTAA CTGTCATTTT      120
TTTCTCTGTA CACTCGAG                               138

```

(2) INFORMATION FOR SEQ ID NO:73:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 208 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

```

GAATTCGGCC TTCATGGCCT ATCATTGTC ATTAAATCTG TAGATTACAT TGAGCATTAT      60
GGACATCTTC AAAATATTTT AAATTTTGAA CAGGAGCATG CTGAAGAGTG TGTTGTTTAA      120
TTTCTATGTA TTTGTACATT TTTTCTCTCT ATCTTATACT GCCGAGACCA GCTCAGTCGG      180
GGAGACCCTA ACCCAACGGC AGCTCGAG                               208

```

(2) INFORMATION FOR SEQ ID NO:74:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```
GAATTCGGCC TTCATGGCCT ACATGAACT GTTAGTCACT TCATTCTGT TTCTCCCTG      60
TTGCAACAGC CCATCTTCGT GGAAGAACC AAGCTTTAGG CTTGGCTCTG AACAGCCACA      120
AAGTGACTTG GCTGAGGTCC TGCCATTTCC CTCATGCTCA GCAGGGGGCA GCAGACCAGG      180
GCAGTTCAGA GTATGGGGTC AAACCCAGGT CCCTGTCCCC ACTCCACCTG TGGATTTACC      240
CTGGATTGGG CAAGCCCAT TACTCGAG      268
```

(2) INFORMATION FOR SEQ ID NO:75:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```
GAATTCGGCC TTCATGGCCT ACGTGAACAA GACCCCTCCCA AACCTTCAGG TAGTCAACCA      60
CCAGCAAGGC CCCCAACCACA GACACATCCT GAAGCTGCTG CCGTCCATGG AGGCCACTGG      120
GGGCGAGAAG TCCAGCACGC CCATCAAGGG CCCCAAGAGG GGACATCCTA GACAGAACCT      180
ACACAAGCAT TTGACATCA ATGAGCATT GCCCTGGATG ATTGTGCTTT TCCTGCTGCT      240
GGTGCTTG TGATTGTGG TGTGCAGTAT CCGGGAAG CTGAG      286
```

(2) INFORMATION FOR SEQ ID NO:76:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 199 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

```
GAATTCTAGA CCTGCCTCGA AAATACACTG TTAATCTCTT AATCTCAAGA GTGTCATTAC      60
AGTGAGAATC TCATTTAAAA GCATACCAAGT GAAATTAATA GCAGTGCTTA TCAAAGAACA      120
CTGAAATCTG TGAGAATCTT TCTAGGAGCA TTCTTTTCTT CTTTGTAGTC CAAGTTCAG      180
GTAGGCCATG AAGGTCGAG      199
```

(2) INFORMATION FOR SEQ ID NO:77:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 233 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

GATTGAATTC TAGACCTGCC TCGAG.TCCA CGTCCATGGC CATCCTGAGC ATGCTGCAGG	60
ACATGAATTT CATCAACAAC TACAAAATTG ACTGCCCCGAC CCTGGCCCCG TTCTGTTTGA	120
TGGTGAAGAA GGGCTACCGG GATCCCCCCT ACCACAACCTG GATGCACGCC TTTTCTGTCT	180
CCCACCTTCTG CTACCTGCTC TATAAGAACC TGGAGCTCAC CAACTACCTC GAG	233

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

GAATTCGGCC TTCATGGCCT AAGAATAGAG AAAACGTTTT CAGCAGGCTT CACAGAGAAA	60
CCAAACAATA TTTAGAATAT GACAGCATAT GAAGAGTCTG CTACTCTCCC AGTGACCCAT	120
ACTTTCTCTT CCATCTCTGC TGGTTCTCTC TACTACCGAT TCTTTCTTGC TGTTCTCCTT	180
CTCCATCACC GTGACTTCTA TTGCCTTACT CTAATGTCTT GTCTTCTGTG TTACCCTTCT	240
GTGTGTTTTG CATTGAGAAC TCCCCCTCCG CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAAAATCCCT GGCTGAGAAC TATTGGATTG	60
GGGCCTCCNG TACCTATCTT TGAGGGGGAA AGGATGCTAC CATCAACTTT TCTGAATGCC	120
AGGAATGCCT TTTAGTATAG TTATTTCACT TACTATTTTA TAGCATATTT TAATTGTATA	180
GTAAGCATTG TGTCTGTTTT ATGTAAGGA AACTAAATT GAGAGATTAG GCTGCTCGTG	240
GTGGCTTATA CTTGTAATC CCAAGCACTC GAG	273

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

```

GAATTCGGCC TTCATGGCCT AGCGAAATGA CGAAATCTAG CCCTTTGAAA ATAACATTGT      60
TTTTAGAAGA GGACAAATCC TTAAAAGTAA CATCAGACCC AAAGGTTGAG CAGAAAATTG      120
AAGTGATACG TGAAATTGAG ATGAGTGTGG ATGATGATGA TATCAATAGT TCGAAAGTAA      180
TTAATGACCT CTTCAAGTAT GTCCTAGAGG AAGGTGAACT AGATATGGAG AAGAGCCAAG      240
AGGAGATGGA TCAAGCATTG GCAGAAAGCA GCGAAGGGCT CGAG                        284

```

(2) INFORMATION FOR SEQ ID NO:81:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

```

GGGAACTGGA GGAAAACCAT CACAAGATGG AGTGCCAGCA AAAACTGATC AAGGAGCTGG      60
AGGGCCAGAG GGAAACCCAG AGAGTGGCTT TGACCCACCT TACGCTGGAC CTAGAAGAAA      120
GGAGCCAGGA GCTGCAGGCA CAAAGCAGCC AGATCCATGA CCTGGAGAGC CACAGCACCG      180
TTCTGGCAAG AGAGCTGCAG GAGAGGGACC AGGAGGTGAA GTCTCAGCGA GAACAGATCG      240
AGGAGCTGCA GAGGCAGAAA GAGCATCTGA CTCAGGATCT CGAG                        284

```

(2) INFORMATION FOR SEQ ID NO:82:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

```

GAATTCGGCC TTCATGGCCT ACTGTGTTGA CTTGGTGGCT TGCTTGATAA GAAGGTTTTA      60
TGAAGCACAG CAGATATCTC AGCTGCTAAT CCTGTAAGCC CTTTACCCAT TCTCGCTTTT      120
CTCTGCTCTT GCCACATCAT GAATAGATTG GTATACTATT GTGGGATACT TCTAGTTTTA      180
GCACATGATA TAGGTTATGG TTAATGTTCC TTTCCATCTT CCTGGTTACT GATAATGTTT      240
CTTTTCTGTA GATGGGTCTA TTCGATGGAA GAGTTTCAGC TTTGTTCTGT TTATTTCCTT      300
GGGACCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:83:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

```

GAATTAATCG TAAGAGAACC TCAGCATTGT GCACGATAAG AGAATGTGTC AGTATTTCAG      60
GGTTCTACAT TTTATCTGTA AAATGTGACT TTTTTTTTTT TTTATCACAA CAGAAGTAAA      120
ATGTTGCTTT GTACCTGGTG TCTTTTATTA AGAATTTACT CCCCCCATTT CTCACAGAGA      180
ATAACAGTCG GGAGTCATTG TCACAATATA ATAGAAATGT TAGCAACCAG ATTCATGTAA      240

```

GGACTAAGTG GTCCTCATGA ATTGCATTAA GACTCTGTAC TGCTCATATT ACACTCCATC 300
CTCTCTGTAG TTTGCTGGGT ATTCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:84:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 312 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC TTCATGGCCT AGAAAGACAT CATTTAAGTN CTTTAAACAT TTAGTTGTG 60
 GTCATAAGTT GACCTTTATG TGCTTTCTGA ATTGGAACCT AAAATAATCT TTAATTCATT 120
 ATTTTTTCTA CTTCTAGGCC AGTTTGTGAGT TTAATATTTA TAAAAGGTTA GATAGTTATA 180
 GATAGGATTA TTTTGCAGTT TTGAAACAAC ATACAAATTG TTATAGATT CAGAGTAGGG 240
 CTAATCACAG GAAAGACAAA AGTCAGAATG CTTNAGGTAA GCCCCTTCTC ATTATATAAG 300
 ATCAAGCTCG AG 312

(2) INFORMATION FOR SEQ ID NO:85:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GAATTCGGCC TTCATGGCCT AAAAAGTTTC AACTTAGAAA AACTAGCAAG GGATTGTTCA 60
 CCCTTACCCC AGTGGTTGGT GCTAGAGAAA AAATGGAGGA TGTCTGTTCC ACGCAGACCC 120
 TGGTGGTTTA AAACACACAT ATAGATGGCT CTGGGACCAT CAAAATAGCA GCAGCAAAGA 180
 GCCACTCCAC CAGCCTCCCC TCCACTCCCC CAGGCCCCAC ACAGCAGAAG GCTCCAGCCA 240
 CTTTTTGGA G CCTGTAGCC TGGCTCCATC TTGCCCTGTG CCACAAATGC CCATGGCCCT 300
 CGAG 304

(2) INFORMATION FOR SEQ ID NO:86:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTTTGAA CACTAAAGCT TTGGATACAC AAATTTATAA CATCTTATTT ATAAATCAGT 60
 GGTGTACAGA AAGCAGAGAT CCCATAATCA AGCATGGCAA ACATGTTGAA GAATATGCTT 120
 ACAATGATTT CTGCTATAGA TTTCATAATG GGGATTGAGA GAAGTAGAGT TATGGTGTG 180
 GTTCACTGCA TTGATTGGAT CAGGCGCTGG AAACCTCTCCC TGATAGATTT TATTCTCACC 240
 TGTTGGGCAA TTTCCAGAAT ATTCTGCTGT AATTTTACAT GTGGGCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```

GAATTCGGCC TTCATGGCCT AGCTAGAAAA AAAAAAAAAA AAGCCCTTTT CAGTTTGTGC      60
ACTGTGTATG GTCCGTGTAG ATTGATGCAG ATTTTCTGAA ATGAAATGTT TGTTTAGACG      120
AGATCATACC GGTAAAGCAG GAATGACAAA GCTTGCTTTT CTGGTATGTT CTAGGTGTAT      180
TGTGACTTTT ACTGTTATAT TAATTGCCAA TATAAGTAAA TATAGATTAT ATATGTATAG      240
TGTTTCACAA AGCTTAGACC TTTACCTTCC AGCCACCCCA CAGTGCTTGA TATTTTCAGAG      300
TCAGTCATTG GTTATACATG TGTAGTTCCA AAGCACATAA GCTAGAAGAA GAAATATTTT      360
TAGGAGCACT ACCATCTGTT TTCAACATGA AATGCCACAC ACATAGAACT CCAACATCTC      420
GAG                                                                    423

```

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTT GGGGGGATTA CAGTTCAACA AGAGATTCAG      60
GCAGAGACAA ATATTCCAAA CTATATCAGG AATTAAGTAG GCTTGCTGT CCTTTTCAG      120
CTTTGAGTCA ACCCATATGA GAGTGAATTC TCCGATCCTG TACATACTCG AG              172

```

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```

GAATTCGGCC TTCATGGCCT ACCCGTGTG TCCAGTATAC CTTATAACAC TTAGCCACTT      60
CTCCCCACCC TCCAGAAGGG GTCCACGTTG AATTCTGAAT CATCTTGAAA ATAAGATTCC      120
AACCACAAAA AAAATTTAGC CATTCTTTA CTAAAAAACA CCAAAAAACA AATCTGTTTT      180
ATAATCACAG ATTTTTCAG AAATTTCTG TATCAGGAAG AAATACAAAT TTTGTCATGT      240
TTCTCAAGCA GTGTCTCGAG                                              260

```

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

```
GAATTCGGCC TTCATGGCCT AACTAAGAT AAAAATAAAC AGATAGGAGA GCTGAATTCC      60
ATTTCAAGTC CTCATGTATA TGCTTACAAA GTTCCAAATT AAGCTTGGGA CTGGTTCTTA      120
CATGGCAGGT AATCCAAACC TTTTCTATTT ACTGAAGATT TTCAGCTCTC TTACAGAAAT      180
ACACAGGCTA CCATTAAAAT TGTAGGGATA AATTTTAAAT TGAATTTGAA AATAAGAGCA      240
AGTACTCGAG                                     250
```

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

```
GAATTGAAAC ACAGAGTTGT TCTGCTGATA GTTTTGGGGA TACGTCCATC TTTTAAGGG      60
ATTGCTTTCA TCTAATTCTG GCAGGACCTC ACCAAAAGAT CCAGCCTCAT ACCTACATCA      120
GACAAAATAT CGCCGTTGTT CCTTCTGTAC TAAAGTATTG TGTTTTGCTT TGGAAACACC      180
CACTCACTTT GCAATAGCCG TGCAAGATGA ATGCAGATTA CACTGATCTT ATGTGTTACA      240
AAATTGGAGA AAGTCTCGAG                                     260
```

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

```
GAATTCGGCC TTCATGGCCT AATTTTCATCT TTTTTCCTG GTGCTGCATA AACATATATT      60
AAATGTTGTT ACTGATCCCT AGTACTGTTG ATTTGTGACC CTTCTCCTGA GGGAGACTAA      120
AGCTGCTTGA GCTAAAGGCT TTGAGACAT CCCATACGGT TCCCTGAACA AAGTTTTCTC      180
TCCTGACCTC AGTTCTCTTG ATGACCTTGG CAAGTGGGCC CGACTAGTTG GACACTAATG      240
AGGCATCGTA ACATGCCGGC CCCATCCTGT CCATTCTGTT CTCTTGCCA TCTAGCATTG      300
AGTGTGTTGT CTTCCTAGTG GGCATGAAGA CGGCTTTAAA ACCATCCACT CGAG          354
```

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

```

GCTGAAAATG CAAAACATGA AGAAAGTGAT TGAGGCAATT CGAGTGGAGC TGGTTCAGTA      60
CTGGGACCAG TGCTTTTATA GCCAGGAGCA GAGACAAGCT TTTGCCCTT TCTGTGCTGA      120
GGACTACACA GAAAGTCTGC TCCAGCTCCA CGATGCTGAG ATTGTGCGGT TAAAAAACTA      180
CTATGAAGTT CACAAGGAAC TCTTTGAAGG TGTCCAGAAG TGGGAAGAAA CCTGGAGGCT      240
TTTCTTAGAG TTTGAGAGAA AAGCTTCAGA TCCAAATCGA TTTACAAACC GAGGAGGAAA      300
TCTTCTAAAA GAAGAAAAAC AACGAGCCAA GCTCCAGAAA ATGTTGCCCA AGCTGGAAGA      360
AGAGTTGAAG GCACGAATTG AATTGTGGGA ACAGGAACAT TCAAAGGCAT TTATGTTGAA      420
TGGGCAGAAA TTCATGGAGT ATGTGGCAGA ACAATGGGAG ATGCATCGAT TGGAGAAAGA      480
GAGACTCCTC GAG                                         493

```

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

```

GAATTCGGCC TTCATGGCCT ACACACGGCC AAATTTGAGG GCATTCTCAC ATGTGTTCTT      60
CTCTCAAAAC CACTGGGGTT GACAGATCCA GGAGGCTAAA AAAAAGTGAC CTCTATAATT      120
CTTTAAAGGT GCTATTTTAA GAANATTGTA TAATTTATTC ACAGTATATC TAAAACAGAA      180
TTAAGGACAA TTAAATATC TTATGTGACA GCCTTTATGT CTAGTCACAT TTGATGAAAT      240
AAAAAAGCTT TGAATCTGAA TAGAAGTTCT ACTGTNTCAG GATTGAACTC GAG          293

```

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

```

GAATTCGGCC TTCATGGCCT AAAAAGACAG GAAAATAAGT CTCTTTGTAT CCTTATTAAT      60
CATTTGAAAT TATGCTATAA TATTTTAA AACTCACCTG TTTGGTTCTG GGTGAAGCAG      120
TTCCTGAAGG AGTGTTTGT CAGAATATAT TGTTAGGTGA ATAGAGGGTT CTGTGGCCAA      180
GTAAGTTTGG GAAATAGTGG GTTAGACAAA GTTGAGTTAC TGTGGCCTT TCAGACCTTT      240
GATACGCTAA TGTGCATTTT AAATCTCCAA GAAGCTCGAG                                         280

```

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

```

GAATTCTCCA GCCTGGGTGA CAGAGTAAGA CTCCATCTCA AAAACAAAAA AACCCAACAG      60
GATAAAATTT AATAGGAGTA AATATAAAGT TCTACGTTT  GATTTTAAAA ATCTAGGTAC      120
TGTATAGTGT GTATTAGTTG GGGTTCCTTT  TTTGAAACTT AATCTTGCCT ATAAAACACA      180
AAAGAGTTTA AGATGATATT GAGACTCCTC CTGTCTTCAT TCCTTTTCCT TCCTAATAGC      240
TCAGTCCTGA AGCTCTTAGG TGAGGCAGAA CAACTCGAG      279

```

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

```

GAATTCGGCC TTCATGGCCT AGGATACCTT CATTTCAAGG AGCCTCTTTA CAGTAACTGG      60
GCTAAACATT TTGTTGTCGT CCGTCGGCCT TATGTCTTCA TCTATAACAG TGACAAAGAC      120
CCTGTGGAGC GTGGAATCAT TAACCTGTCC ACAGCACAGG TGGAGTACAG TGAGGACCAG      180
CAGGCCATGG TGAAGACACC AAACACCTTT GCTGTCTGCA CAAAGCACCG TGGGGTCCTT      240
TTGCAGGCCC TCAATGACAA AGACATGAAC GACTGGTTGT ATGCCTTCAA CCCACTTCTA      300
GCTCGAG      307

```

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

```

GAGCTGTGTC AGCATCGATC AGGGGTCTGT AGACAAAAAT TCCCAAAGAT TTGAGACTTT      60
ATTGGGGGAA ACAGATCACT GCGGGGAAT AAGCCACAGG CCAAAGGAGG AAATGCTGGG      120
ACCAGAAGTC CCGCTTGCCG CCTTTTGCTA AAAGTTCCGC ACGCTGCTC GCGGTGGGCG      180
CAAGCATAGT GTCGTCGGGG CTCTGCGACG TCTGATTGGC TCTCTGCAGT GCACCGTCGA      240
GGTAGAAGGC TCAGCTCCTA GTCGCTCCCA AATTACTTTG TTGGTGCTCG AG      292

```

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

```

GAATTCGGCC TTCATGGCCT AGCTTGAGGA ATGACCCAAC TCTCTCTGGA AAGTCACTTT      60

```

```

GCCTCTCTGT TCTGGTTCTC TCATTTTATA AAGTGCCTTC TTCCTTTCTG CATTTATAAG      120
TAAACATGAG AAAAATCTGA AAAGACTTCT TCAGGATGTT TAAGGAAACA AATGTTGCTT      180
TCCTTGGGTT GGGTCGTTTC ATAAGAGTGA TGTTTGCCAT AAAACTGGAG CCTCATAGAC      240
GATCCTGCAG GGAGGAAGCT TTCCTTGGTC ACCTGACTCA TGTGTTTATA TATAGTATAG      300
AGGAGAGGTA TTCCAAAAGA CCCGTCGCTT TTCCTGTGTC CCACAGCTGC CTGTAGAGTT      360
TGGGCACCAT AACTTTTAGC AGCTGGAAAT CCTCGAG                                397

```

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

```

GAATTCGGCC AAAGAGGCCT ATTAATTTAA TAAAGCCATA TCATACCTCT GTTTAACATT      60
GTTAAAAGGA AACTGTGTGT GTGTATTTGT GTTAATGTTA ANTTCTCTTC ATTTTGTGTC      120
TTGGGGGGCT GTTTATTTGA GGATGGTCGG GGGGCGGGTG GGTGAGACCC ATCCATCCCC      180
CATGGAAGAC CAGACCCATC CATCCCCCAT GGAAGACCAT TCCCGTGTGT TCAGACTGGC      240
AGGGTACTTC CATAGACAGG AACATTCTGG ATGCTCTGAT GCTGAACACT ACCAGAATCG      300
GCCATGGATT TGCTTTGAGC AAACACCCCG CAGTCAGGAC TTACTCCTGG AAAAAGGACA      360
TCTTCTCGAG                                370

```

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

```

GAAAAAATA GACAAACTA TGATGTAAAA ATGCTTAAAA ACAATTATTC CTCTCTGCTA      60
ATTTTAATGC AAAATAAATG ATGCTAGCAT TTAATATGTT TATATGATCT TGTTTTTAGG      120
ATTGAAATTT TAATACAATG GCCTTTTGTA ACTATTTTTC CTATTATAGC TCAGGTGTTT      180
GAATTCTCTC TACCCACCT ATCACCCTTA TCCCCTAACA AAGAGTCTGG CTTCATAAAT      240
ACTGTTGAAT GAAAATTGGT TCTCTAAATG GTTAACAAGA TGAATCCACA TAAATCATAA      300
TTCAGTACTG AGGAACCGAA TTTATACCCA GCGTCTCGAG                                340

```

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGA TGTGAGAATG ATGGGCTTGG      60

```

```

AGTGTTCTGG AAATAGCTGG GAGGCCTGTG TGTTTAGGAG CGCCTTAAAC AGTAGGATAT      120
AAGGGCAGAG AAGTAGCTGG GAACTGAGAA GAACTTTGGC TGTTATTCTA GTAAGACTGA      180
AAATTTCAGG TGGGATTGA ACAGAGATGT GTGGTGATCT GACTTGGTTC ATTCTGCTGT      240
GGTGAAGAGA CTGGAGGTGC GGGGCAAGTA TGAAGCATG GAGACCATA ATTTATGGGG      300
GCAATGGTAG AGGGAAGAGA AACAATGCTA TTAAGTGGAG TAGGAGCACA CAGAGAACAA      360
GCCACTCGAG                                     370

```

(2) INFORMATION FOR SEQ ID NO:103:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 270 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GCGATTGAAT TCTAGACCTG CCTTGAGATC ACCGAGTGCT TCATCTCTGA CAGTTCCTCT      60
GACCAGATGA CCACAGGCAC CAACGAGAAC GCCGACAGCA TGACATCCAT GAGCACACCC      120
TCAGAGCCTG GCATCTGCCG CTTTACCGCC TCACCACCCA AGCCCCAGGA TCGGGACCGG      180
GGCAAAAACG TGGCTGTGCC CATCCCTCAC CGGGCCAACA AGAGTGAGTG CTCAGACCAC      240
CTCCAGGCA GTGCCCCCCC GACTCTCGAG                                     270

```

(2) INFORMATION FOR SEQ ID NO:104:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

```

GAATTCGCCT TCATGGCCTA ATATGCTTAT GAATATGATG TTGATGGACA GCTCCAAACA      60
GTTTACCTCA ATGAAAAGAT AATGTGGCGG TACAACTACG ATCTGAATGG AAACCTCCAT      120
TTACTGAACC CAAGTAACAG TGCGCGTCTG ACACCCCTTC GCTATGACCT GCGAGACAGA      180
ATCACTCGAC TGGGTGATGT TCAATATCGG TTGGATGAAG ATGGTTTCCT ACGTCAAAGG      240
GGCACGGAAA TCTTTGAATA TAGCTCCAAG GGGCTTCTAA CTCGAG                                     286

```

(2) INFORMATION FOR SEQ ID NO:105:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

```

GAATTCGGCC TTCATGGCCT ACTTAAATCT TAGATGCTAA TGGGAGAAAC TGATTTTTTA      60
AAAAACAGGG AAATAATTA ACATTTTATC AGATATGCTA TGAAGTAAAC AGTTGAAGAC      120
TGACAGTCCA GTGGATACCG AGGAGTTCCT TTAGATACCC TGGTGAGGTA AGGACACAGG      180
CAAGGGGAGA GCTGAGACCT GAATATGAGG AGAAGCCAGG CGAGCACACA ATAGGGCAGA      240

```

AAGGAGCAGT AGGTCAAAGC CTGAGGCAGG AGAGAGCTTG ACTGACTCGA G

291

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GAATTCGGCC	TTCATGGCCT	AGAAATGGTT	CTGAAAGCGA	CAGTAGAGAG	ATGCAGTTGT	60
GATGATTTCA	ACAACCTGGA	TGTTTCTTT	CTCCTCTTTG	CTTCCATTCA	TCTCTGTTGG	120
CTGCTGTTGA	TGGAGTCAGA	CAGTAAACAC	GTGGCTTGGA	TAACACCCAT	CATCCTATGA	180
AGAATATAGG	GAGTACTTGT	TCTCTGTTGA	TTCAACTTTT	ATGTCTCCAG	TAACATTGCG	240
CTTATGAAGG	TACCTGTATT	TGTATGGACT	CTGAATAAAG	AAGAATTCAT	TTGTTTAGCA	300
AGTATTAGTT	CAGCAACCAC	TGAGAAACAA	GCACTCGAG			339

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

GAATTCGGCC	TTCATGGCCT	ACATCATGTC	AAAGAGTACT	ACATACAGTT	TGGAATCTCC	60
TAAAGACCCG	GTACTACCAG	CTCGTTTCTT	CACTCAACCT	GACAAGAATT	TCAGTAACAC	120
CAAAAATTAT	CTGCCTCCTG	AAATGAAATC	ATTTTTCAC	CCTGGAAAAC	CTAAAACAAC	180
CAATGTTCTA	GGAGCTGTTA	ACAAGCCACT	TTTCATCAGCA	GGCAAGCAAT	CTCAGACCAA	240
ATCATACGCA	ATGGAAACTG	TAAGCAATGC	AAGCAGCAGC	TCAAATCCAA	GCTCTCCTGG	300
AAGAATAAAG	GGGAGGCTTG	ATAGTTCTGA	AATGGATCAC	AGTGAAAATG	AAGATTACAC	360
AATGTCTTCA	CCTTTGCCGG	GGAAAAAAG	TGACAAGAGA	GACGACTCTG	ATCTTGTAAG	420
GTCTGAATCG	GAGCTCGAG					439

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCGAGAGGCA	GGTCTAGAAT	60
TCCAAATGTA	AAATTTACTA	AGGCTTTTCA	TGTGGAAGTA	GAATGCATAT	ATCTTTCTTG	120
ATATAACAAA	TGAATTTGGT	TGTAGCTAAC	GTGTTGTACT	AGTAAAGGTC	CACCTGCTAA	180
ACTTTTCTT	TTTTGTTGAG	GTATAGACAG	TAGAGTGATA	CCGATACATG	AGGAAAATGA	240
GAACTGGAAT	GCAGGCCAAA	AGCTGGTCCT	TTCCAGATGA	ATGTAACCAA	GACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:109:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```
GAATTCGGCC TTCATGGCCT ACACTCTCAA ATATGTGGCC TTAAACGGGA CCAAAGTAGG      60
AAAGCAGATA GTGGAAGAACT TCTCTCCCAA TCAGACCAAG TTCACGGTGC AAAGAACGGA      120
CCCCGTGTCA CGTACCGCT TTACCCTCAG CGCCAGGACG CAGGTGGGCT CTGGGGAAGC      180
CGTCACAGAG GAGTCACCAG CACCCCGAA TGAAGCTTAC ACCAACAAACC AAGCAGACAT      240
CGCCACCCAG GGCTGGTTCA TTGGGCTTAT GTGCGCCATC GCCCTCCTGG TGCTGATCCT      300
GCTCATCGTC TGTTCATCA AGAGGAGTCG CGGCGGCAAG TACCAATAC TCGAG              355
```

(2) INFORMATION FOR SEQ ID NO:110:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 407 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

```
GAAAAAACTG GGTCAAAGAA TTACGGAAAA TGTGGGAAA TGAAATCTGT TTATGTATAG      60
TTGGTAATAA AATAGACTTG GAAAAGGAGA GACATGTTTC CATTCAAGAA GCAGAGTCGT      120
ATGCAGAATC TGTGGGAGCA AAACATTATC ATACTTCAGC CAAACAGAAC AAAGGAATTG      180
AGGAACTCTT TCTTGACCTT TGTAAGAGGA TGATAGAAAC AGCACAAGTG GATGAGAGAG      240
CAAAAGGCAA TGGCTCTAGT CAGCCGGGAA CTGCAAGGCG AGGTGTACAG ATTATTGATG      300
ATGAACCTCA AGCCAGACC AGTGGTGGAG GGTGCTGTTT TTCTGGATAA CTGTTACGCG      360
CTAAGAAATT AAAAGACAGA ACAAACCTGT GGATCATTGC CCTCGAG              407
```

(2) INFORMATION FOR SEQ ID NO:111:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 395 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

```
GAATTCGGCC TTCATGGCCT AAAAGAAAGT ACATTAAAGC AACTTGCATC TCAAAACAAT      60
ACATTTCTCT GGTTGAAGTT TTAGTGAAAA TCGATTATT CCTCCTCTGA GTTTTACCCA      120
ATGGGTAAAG TTGTCTAAAT ATGGGATTCC TTAGAATCCA TCCTCCTTCC CAAGCATTTT      180
CCCATTGTTT CTTCACCCCC CAAATTCTTA CCCCATTCA GGCAGAGCTG AGCAAAACATA      240
AGCCTTCTCT GAAGTATTGA GGGAAAGTCT GCTAAACGGC TAAACTACTT AAGGAGCTAA      300
CAGAAAAGGT TGTATCAGAG AAACAGTGGG GAAACACAGG TTTCTAATTA TATCTGGCAC      360
TGGAGAGAAT GTCAAAGGTA TTGGCCAGC TCGAG              395
```

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

```

GAATTCTAGA AACTACAGTA GTGGGACACA TAACATAGAA GTAATCGTCC AGGATTCTGC      60
TGAAGAAGT AAGAGTGTC ACCACATATT TTCTGTTCAA GAGAATAATC ATCTCAGTTT      120
TGATCCCCTG GCATCATTTA TTCTCCGTAC TGATCACTAC ATCATGGCCC GGGTCCTTTT      180
TGTGCTGATT GTGCTGAGCC AGCTCACCAT TCTCATTATT TTTAGATATC GAGGATACCC      240
AGAGCTTAA GAACCTTCAG GGTTTATAAA TCTGACCTCA TTTTCTCTTC AATGTCTCGA      300
G                                          301

```

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

```

GAATTCGGCC TTCATGGCCT AAGCATGCTG TCTTGTGATG GTGATTTTCAT GTGTTTTCTG      60
CATGGGATTA TTAACGGCAT CCATTTTCTT GGGCGTCAAG TTGTTGCAGG TGTCACCAT      120
TGCGATGCAG CAGCAAGAAA AACTCATCCA ACAAGAGAGG GCACTGCTAA ACTTTACAGA      180
ATGGAAGAGA AGCTGTGCCC TTCAGATGAA ATATTGCCAA GCCTTCATGC AAAACTCATT      240
AAGTTCAGCC CATAACAGCA GTCTCGAG                                          268

```

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

```

GAATTCGGCC TTCATGGCCT ACCCGCATCC CAGCTCTATT TAAAAAATA AAGAAGAAGA      60
TAATTCATTT CCTTAAGCTG CCCTTACACT ATTAGTCAGG AATGTTTGTG TTCACTTCCA      120
CTACATACCT TACGATCTCT TTTGCTTGC TTTTTTTCAG TCAAGTCTCT ATTTATGAGG      180
TGGACAAGCA AGATTGTCGC AAATTTTGCA CTACTGGCAT CGATGGAGCC ATGACAATTT      240
GGGATTTCAG GACCCTCGAG                                          260

```

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

GAATTCGGCC	TTCATGGCCT	AAACATTTTC	TGAAAAACGT	GATAGAAAGA	AGGAGGAGCT	60
GTTTCTAGGA	GGGAAATAAA	TAATTTGGCA	GGAGACTTTT	TGAACTAGAT	ATCTATTGAA	120
TAACAAAGTG	ACAATGTTCC	CCATCCTCTC	ATTTCATTTC	CCAAATTTAC	TTCTCGTCCC	180
AATTCAAATC	ATTCTTACTT	ATGATCGGCG	CTATGTCAGT	GCCTCTCAGC	TGGTCTTCCC	240
AGACCCAGTC	ACCCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 238 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

GAATTCGGCC	TTCATGGCCT	AATTACATTT	ATGCAACCAA	GCTATCAAAA	GGACTGGCTG	60
TCCTTGGGAA	TGAAACGTAA	CAAAATCGTC	AATAGAGTAT	TATTGGAAAA	GATTGTTTTC	120
AGTCATGAAC	TAGCTATTTA	AATGAGAAAA	CAATGTAAT	GATGCTTTCT	GTCATGATTT	180
TATAAATAAA	TGTCAATTGT	AGGAAATTGG	AAAAATAAAT	GAAAAAGAAA	AACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

GAATTCGGCC	AAAGAGGCCT	ACCCTAGACC	TGTTTCTGT	TCTCTACTCT	TGAAATGCTA	60
ATGACCTTCA	TGACCAGAGT	CCGCTATTGC	AGTTTGTGGT	TGACAGGCAT	CTCTCACTCA	120
CTGTGCTGCA	ACTCAACTCT	TTATCTTCAA	CCAAACAGGG	CCTCCCCGCA	GCTTCCAC	180
TGCCACTCAG	TGGCACTCCA	TCCAGGGTTT	CCAAAGTGTA	AGACCCCGGA	ATTATCTTT	240
GACACTTCCA	TCTCCCTCCA	CCCCTCATCC	AATTCATCA			279

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 656 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

```

GAATTCGGCC AAAGAGGCCT AGTTATAATG ATGGAAGAAG TGGAAAAACT TTGTGATCGG      60
CTTGAAGCTGG CAAGCTTACA GTGCTTGAAT GAAACACTCA CATCATGCAC AAAAGAATAG      120
GAAAGGCTGC TTTGGAAAAA CAGATAGAAG AAATAAATGA GCAAATCAGA AAAGAGAAAG      180
AGGAAGCTGA GGCTCGTATG CGACAAGCAT CTAAGAACAC AGAGAAATCA ACTGGTGGAG      240
GTGGAATGG AAGTAAAAAT TGGTCAGAAG ATGATCTACA ATTACTAATT AAAGCTGTGA      300
ATCTGTTCCC TGCTGGAACA AATTCAAGAT GGGAAGTTAT TGCTAATTAC ATGAACATAC      360
ATTCTTCCTC TGGAGTCAAA AGAACTGCCA AAGATGTTNT TGGCAAAGCA AAGAGTCTCC      420
AAAAACTTGA CCCTCATCAA ANAGATGACA TAAATATAAA GGCAATTGAT AAGTTCAANA      480
AAGAACATGG AGTGGTACCT CAAGCAGACA ACGCAACGCC TTCAGAACGA TTTGAAGGTC      540
CATATACAGA CTTACCCCT TGGACAACAG AAGAACAGAA GCTTTTGGA CAAGNTTTGA      600
AAACATACCC AGTAAATACA CCTGAAAGNT GGGAAANAT AGCAGAAAGT CTCGAG      656

```

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

```

GAATTCGGCC AAAGAGGCCT AGAGACAAAT AGGTGATACT GAATTTTATA CTGTTTTCTA      60
CTTTTCCATT AAAACATTGG CACCTCAATG ATAAAGAAAT TTAAGGTATA AAATTAAATG      120
TAAAAATTAA TTTCAGCTTC ATTTTCGTATT TCGAANCAAT CTANACTGTT GTGATGAGTG      180
TATGTCTGAA CCTGTAATTC TTAANAANACT TCTTAATCTT CTAGAAGAAA AATCTCCGAA      240
GAGCTCTCTC TAGAAGTCCA AAATGGCTAG CCATTATGCT TCTTTGAAAG GACATGATAA      300
TGGGACCAGG ATGGTTTTTT GGAGTACCAA GCAAGGGGAA TGGAGCACTT TAAGGGCGCC      360
TGTTAGTAAC ATGAATTGGA AATCTGTGTC GAGTACCTCT GATCTAAACG GTAAAACAAG      420
CTGCTGGAG AGCAGCTGTA CCTAACAATA CTGTAATGTA CATTAAACATT ACAGCCTCTC      480
AATTCAGGC AGGTGTAACA GTTCCTTTCC ACCAGATCTC GAG      523

```

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

```

GAATTCGGCC AAAGAGGCCT AATTTCTTCC TGTGATATGA GAATTTCTTT TCTTTCAGCA      60
GCTTTACCTG CATTGGCTT TGGCTTTTGC AATCGGCCCC TCATTCTCGA G      111

```

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

```

GAATTCGGCC AAAGAGGCCT AACCGCGGCC GCTACTTCGG CCTCTTTGGA AAAAAAAG 60
TGAAAGAAAA NATCACAATA CAGGGAAAAG TGAGCTAAAA ATCCCGGCAT TAAAAAGCCC 120
TTGATGTGGT CCTGAATCGG CTATTCTAT CTGTTCCCTG AGCCTAACCT CAGCGCTGGC 180
CTCTCTAAAC CTCTTTTCAG TCCTCTCATT TTGAAAACAG GGCCCATAC ACATTCTCTG 240
AAAGCTTGCT GAGTGATTTA ACCACATAGT CTAGGGGAGG CACTCATCAA ACATAAGGCC 300
TCTCTTTTGG ATTTTATCC TATAGTGGTA TCTATCTAGA GGCTGGTGAA GACAGTGTGG 360
TGGAAGGAAA GTGGGAAGGA TACACTGAAA TAGGACATAG ACGTAGAGGG GAGTCGATGG 420
TCATCTGGCT TGATAGGGAA AGTTAGAGAG CTCTCCTGAA CCACAGTTAC AGAGCTTGGG 480
ATTATAACAC ACACAGCCCC AGAGAAAACA CTTGTGTTAC CATATTCCT CTTCTGCTGG 540
GGCTCTGGCA CCTTAATTGG TCAAAGGCA GCACTCGAG 579

```

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

```

GAATTCTAGG AATGGGTCGG GAAGTTGAGA ATCTTATATT AGAAAATACA CAACTGTGG 60
AAACCAAAAA TGCTTGAAC ATAGTGAAGA ATGATTGAT AGCAAAAGTG GATGAACTGA 120
CCTGTGAGAA AGATGTGCTG CAAGGGGAAT TGGAGGCTGT GAAGCAAGCC AAAGTGAAC 180
TAGAGGAAAA GAACAGAGAA TTGGAGGAAG AGCTTAGGAA AGCTCGGCA GAAGCTGAAG 240
ATGCAAGGCA ACTCGAG 257

```

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

```

GAATTCCTGT AACTCGGAAA AGATATCAGA GGAATGTTTC TGGCATCAGA GAGAAAGATG 60
AGAGCTCACC AGGTGCTCAC CTTCTCCTG CTCTTTCGTG ATCACCTCGG TGGCCTCTGA 120
AAACGCCAGC ACATCCCGAG GCTGTGGGCT GGACCTCCTC CCTCAGTACG TGTCCTGTG 180
CGACCTGGAC GCCATCTGGG GCATTGTGGT GGAGGCGGTG GCCGGGGCGG GCGCCCTGAT 240
CACACTGCTC CTGATGCTCA TCCTCCTGGT CGGGCTGCCC TTCATCAAGG AGAAGGAGAA 300
GAAGAGCCCT GTGGGCCTCC ACTTCTGTT CTCCTGGGG ACCCTGGGCC TCTTTGGGCT 360
GACGTTTGCC TTCATCATCC AGGAGGACGA GACCATCTGC TCTGTCCGCC GGTCACTCGA 420
G 421

```

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTCTAGA CCTGCCTCGA GAAAATGAAA GTCTTTTCTC AAAAACTTC TTCCCAGGTC	60
TGTGAAGCAG CACAGTGGCC CTTCTGGCT CTCACCTGT ACCTCGTCCT TGTTCGCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC TTCATGGCCT AAGATGGCGT CTCACAAATC ATATGCCAAT TACTGAAAT	60
GGAGGTGAAA ATATTCTAGA TTTATTGTGG GATATATATA TTTTATGGTG TATGGCTCCC	120
AACACCATAT GCCACTGAAC TATATAAAAC TTTATGTCAG AACACTTACT TGTGTCATAT	180
GTAACCTCT TGCAAATAAT ATTCCCTTAC TACAGATCTG TCCCACTGTT CTCAGAAAAT	240
AAAACATGGG AACGTTGGAA TGTCTCCTTG CTATAAGATA TTGAATTCTA GACCTGCCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 508 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC TTCATGGCCT ATGAAGACAA AGCTAACTTA CAAAAGCAGC TGGTTGAAGC	60
AATGAATACG CAATTAGAAC TTTCAGAACA ACTTAAATTT CAGAACAAC CTGAAGATAA	120
TGTTAAAAAA CTACAAGAAG AGATTGAGAA AATTAGGCCA GGCTTTGAGG AGCAAATTTT	180
ATATCTGCAA AAGCAATTAG ACGCTACCAC TGATGAAAAG AAGGAAACAG TTAACAAC	240
CCAAAATATC ATTGAGGCTA ATTCTCAGCA TTACCAAAAA AATATTAATA GTTTGCAGGA	300
AGAGCTTTTA CAGTTGAAAG CTATACACCA AGAAGAGGTG AAAGAGTTGA TGTGCCAGAT	360
TGAAGCATCA GCTAAGGAAC ATGAAGCAGA GATAAATAAG TTGAACGAGC TAAAAGAGAA	420
CTTAGTAAAA CAATGTGAGG CAAGTGAAAA GAACATCCAG AAGAAATATG AATGTGAGTT	480
AGAAAATTTA AGGAAAGCCA CCCTCGAG	508

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 713 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

```

GAATTCGGCC TTCATGGCCT AGCGGCAGTC CAGATCACGG TTAGTGTGAC CTGACTGGAG      60
AAAAATTATG TGTCTGCAAT GATAGTTGGC AAGGTCCTGA TTGTTCTTTG AATGTTCCCT      120
CTACTGAGTC TTAGTGGATT CTGCCAAACG TTAACCCCTT CAGTCCTTCT GTAGGTCGGG      180
CTTCACATAA AGCAGTTTAA CACGGGAAAT TTATGTGGGT GATTGGTGGA TATACTTTTA      240
ACTACAGTTC TTTTCAAATG GTCCTAAATT ACAATTTAGA AAGCAGTATA TGAATGTAG      300
GAACTCCATC AAGGGGACCT CTCCAGAGAT ATGGACACTC TCTTGCTTTA TATCAGGAAA      360
ACATCTTTAT GTATGGAGGC GCCCAAGGC CCGACCCCTC CCCCAGGGG GCAGTCCCTC      420
TCTTGACAGG CTCAGCTTGC GGGGTGGGGG GAGTCATGCC CAGGGGAGGA GACTTTTAT      480
CTGGAGGGGA GAGAAGGATT CTAGGGGTGT GGAGTTGGAG AAAGAGGCTT CCTTGAGCCA      540
CCCTTCCCAC CCCAGCCCTT GNTGGTCCCT AGGCCAAGCC ACCAAGTGAA ACCTTCCAGG      600
ATACTAGCCC GCCAGCTGTG GGGCCAGAA AGCCAGCCTG CCTTTTAGCA CTGGATACA      660
CACAGACCCA CGGAGCTCTC TGTGTTTGGC CTCTCACACA CACACAACCTC GAG      713

```

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

```

GAATTCGGCC AAAGAGGCCT AAGAGATTCA GGACCTGCAG AGTCGCCAGA AGCATGAAAT      60
TGAATCTTTG TATACTAAAC TGGGCAAGGT TCCCCCTGCT GTCATTATTC CCCCAGCTGC      120
TCCTCTGTCT GGGAGAAGAA GGAGACCCAC TAAAGCAAA GGCAGCAAGT CTAGTCGCAG      180
CAGCTCATTG GGCAATAAAA GCCCACAGCT TTCAGGCAAC CTGTCTGGTC AGAGTGAAC      240
TTCAGTCTTA CACCCCAAC AGACCTCCAC AGTCGAG      277

```

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

```

GAATTCGGCC TTCATGGCCT AAGGCTACCG ATATTGGAGA AGCTAACTAT GGGTTTTACC      60
ACACGTAACA GCTTTTTTGGT GAAATCAGTT GTTATACTAA TAAGCTTTCC TCTAATTGAT      120
TTGAGTTTTG GTTTTTGTGT TTGTATTTGC GGGTTTTGTC TCTTTTGTTC TCTTGTTTTT      180
AGTAAATTGG TTTTCTTCA ATGTATTTTC TTAAGTAGT CTAGCTTTAC CCAGTTTCCT      240
TGGCAAATTG AAATTTAGGC CATGAAGGCC GAATTCGGCC TTCATGGCCT ACTCAGCCTC      300
CCCAAGTAGC TGGGACTACA GCGTGTGCC ACTATTCTCA GCTGATTTT GTATTTTATG      360
TGGAGACGGG TTTTGCCAT GTTAGTTGGC CAGGATGGTC TCTCTCTCGA CGTCGTGATC      420
CGCCCGCCTC GGCCTCCCAA ATTGCTGTGA TGACAGGCGT GAGCCACCCC GCNTGGCNTG      480
TCCTACCTCT TTTTAAAGAC CTCTTCCTGT AAGCACTGGA TAATCTACTT CTAGTAATGT      540
GAAACTGACT ATATNTTGAA TTCATATGTT TTCAATCAAC CTGTTGCAGT TTATATTTCA      600
CACCTGCTC CCTTTGACA GTTAACTAC AGATAGTCTC AGCAGTTCTG GAGACCATGT      660
AAAGCTCGAG      670

```

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

```

GAATTCGGCC TTCATGGCCT ACGACTCTGC TCTATTTACC ACTATCAGGC CAATCCTCCT      60
GACATGCTGT TAATATTTAG AAATATTTCT CCAACATTCA GAGTGCCTGG GTACCACACA      120
TGGATGCGAC TAAGATTCTT AAGTCTGGTT TCTAAGAGCT TCTTCAATGT CTCCAACAT      180
CTTTTCAGGC TCATGTTTGA GACCTTCCTT TCAAGAATAA TTTGCTTGTG ATCTGGTTCA      240
AGCTGAACAG AGATTTTCAG ATGACTCCCA AACTATCTGC AACACATCAG CCCTATTAAC      300
TCTTCTCAGA ATGCTCATAC AGAAGCCATG CCAGTGCACA AAAGCCACTT CTGACACCTG      360
GCCCTGTCTG ACTCATGGAT TTCTTCCAGG ATTGCTCTTT CTATCTGCTT TAAACCTCCT      420
TGTC AATTGA CTTTCCTTGG CTCCCAACCC ACTTTACTCG AG                          462

```

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

```

GAATTCGGCC TTCGTGGCCT ANATATTCTA AGCATTCAAT TTGTCAGTTT CTGAGATTTT      60
CTTTCCATCT TAGTTTTTTA GAAGTCAGAA AATGACTTTT CACATTCAGT TAGGGTATAT      120
AACAATGTTA ACGTAAGTTT ATGAGCTGAG TAGGTAGTTA ATAAACATCC TTTTAAGTTG      180
TAATGCTTTG AAATAGCATA TTAAAGGGTT GCAAGGAAA ATTGGAACAT CAGTGTGAGT      240
TATTTTACAG TCATTTGTAG GTCTGTTTGT GACCTTGGCC TTTTCACACT TGTTTGTCTA      300
TCACCTTTAG TATATTACTC TTTGGCACAG GTTGCTAAT CACATTAATT TTTGCATCAA      360
AAATCCCTTG GTTTAGTGAT TCTTAATGAT GTTTATTTTG GAAAGTCATG GACCTGAATT      420
CTTTGAGTAG TTCATGAAAA CCATATACCT TTCCCAGAGA AATGGGGTGC ATATAATTTT      480
AGGAAGTTCA AGGTAGGGAA AACAAGCTAA AAATCCCAAC TTATTTTCATC TCGAG          535

```

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

```

GAATTCGGCC TTCATGGCCT AAGGGGATCA TCAAAGATGT TGGACACCTT GTGTTCAAAT      60
CTTGGTTTCA GTGCGGCCTG TGCAGATCGG CTTTTTGGTT TGGTTGTCTT GGCCTGGATA      120
CCAGTGGAGA AGATGTCATC CATATCATCA TCAAATATAG ACTTGGTTTC CACTTTCTTT      180
TTGGACTTTT CTTTTGTTT TACAGTTAAG TCAGCAAAGA TATCAATGTT ATCATCAAAT      240

```

AAATTAGATT CCAATGTTTT CTCCTTCTCT CTGGTTTTCT GAGAGGGTTT AATTGCTTCC 300
 GTAGCAAATA TATCATCCTC AAAAATATCT TGTGTTGTTA ATATGACATC CTGCTGACTA 360
 CTGGATTTTG TCTCATTCTT CTTGACTTTC TGATCCTCGA G 401

(2) INFORMATION FOR SEQ ID NO:133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

GAATTCGGCC TTCATGGCCT AGTAGATGAA CTAGAAGATG GATAAACGAA GATAGATAAA 60
 ATGAAGAAAA ACAAAAGTCA AGGAGAACTC AGGCGTCCAA GAGTGTGTAA ACAACTTCTG 120
 GTGTGAGACG CGCTACATTG CGCTAAATGG CCTGTGCGCT TCTGGTTTTT CCCTTCCTCT 180
 GTTGATTTTT TATAGTTGTC TTTTATTTTA AACACGCCTC CCCCCCCCCT TTTTAACTG 240
 ATTTTACCAT CACTCTCTCT AGCCCTGCCT CCCTAGAATT AGCTGCTTCT TACCTCCCTT 300
 GGATCTGGAA CTTAAATATT AACGTGTATA TAAGTTAATA GTAAGTAGAC CGTGAATTTA 360
 GAAGAGTAAA ACAGAATCAT GAGTACGTAG TCACTGTGGC CCCTTTTTTG CTGGATTTC A 420
 AGTTCGTAAG CATTTTTGGA AGAGAGTCGA AGGGAAGGG GTGGCTTGCC AGTCAGTTGA 480
 GTGATGCATG GCTCGAG 497

(2) INFORMATION FOR SEQ ID NO:134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCGGCC TTCATGGCCT AGGCTGGTCA TTGAGAGTGT TGGTGCAGTC AAACCTGGAAC 60
 ACGATGTGAT TGGTAAACAT GTGCTTGATA CATCGAACAA AATATTCTGT CTCTGCTTCT 120
 GTAAGTTGAA CAGGCTCAGA AGACTTGAAC AAGGGTCCTA TATTCAGAAA CTCAGGAATG 180
 GCAGCCAATT GTTCTTGGGG ATATATTTCT AATGAAGTGC TAGACTATCC AATTACTTAA 240
 TTTCTTATAC CTTTAGATAA TCAGTATGAA AAGTTCCCAT TTATAATGGA AATGAAAATT 300
 CTTAACTAAA CTATACATGT AATATGTATT TCTAGAAGAG AATAAAAACC CAAGTCCTCG 360
 AG 362

(2) INFORMATION FOR SEQ ID NO:135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCGGCC TTCATGGCCT ACCCCAATCA ATGGATCCTC AACTCCAAAT CCAAAGATAG 60

CATCTTCTGT	CACTGCTGGA	GTTGCCAGTT	CACTCTCAGA	AAAAATAGCC	GACAGCATTG	120
GAAATAACCG	GCAAAATGCA	CCATTGACTT	CCATTCAAAT	TCGTTTTATT	CAGAACATGA	180
TACAGGAAAC	GTTGGATGAC	TTTAGAGAAG	CATGCCATAG	GGACATTGTG	AATTTGCAAG	240
TGGAGATGAT	TAAACAGTTT	CATATGCAAC	TGAATGAAAT	GCATTCTTTG	CTGGAAAGAT	300
ACTCAGTGAA	TGAAGGTTTA	GTGGCTGAAA	TTGAAAGACT	ACGAGAAGAA	AACAAAAGAT	360
TATGGGCCCC	CCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:136:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 333 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAATTCGGCC	TTCATGGCCT	AAGCAAACCT	CATGCAGCTG	GTGGAACCTAG	ATGTGTCTCG	60
AAATGAGATT	CCTGAAATTC	CAGAAAGCAT	TTCATTCTGT	AAAGCACTGC	AGGTAGCTGA	120
CTTCAGCGGA	AACCCACTGA	CTAGGTTGCC	AGAAAGCTTT	CCTGAATTAC	AGAATTTAAC	180
ATGTCTTTCT	GTAAATGACA	TCTCACTACA	GTCTCTACCT	GAAATATTG	GCAATCTTTA	240
TAACCTGGCT	TCACTGGAAC	TGAGAGAGAA	TCTTCTTACA	TATCTTCCTG	ACTCTCTTAC	300
CCAGCTGCGA	AGACTAGAAG	AACTTGACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:137:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTCGGCC	AATGAAGCCT	ACTTTAGTAT	TTTGGCACTT	CCTAATTGAC	ACCTTGGGAG	60
ACTGCAGGAA	GGGAACGAGA	ATCATTNNTA	GGNTATTTGT	GTGTGTGTGT	GGTTTTTTTT	120
TTTTTTTGGA	AGACAGAGTC	TCACACTTTT	GCCCAGGCTG	GAGTGCAGTG	GCGTGATCTC	180
GGCTCACTGC	AACCTCTGCC	TCCAGGGTTC	AAGCGATTCT	CTTGCCTCAG	CTTCCCAGT	240
AGCTGGGATT	ACAGGCACAC	GCCACAACGC	CTGGCTAATT	TTTATATTTT	TAGTAGAGAC	300
AGTCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:138:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 599 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTCGGCC	AAAGAGGCCT	AAACTCAGAA	TGGTGCTACT	TGAAGACTCT	GGATCTGCTG	60
ACTTCAGAAG	ACATTTTGTC	AACCTGAGTC	CCTTCACCAT	TACTGTGGTC	TTACTTCTCA	120


```

GTGCCTGTTT TGTCACCACT TCTCTGGAG GAACAGACAA GGAGCTGAGG CTAGTGGATG 180
GTGAAAACAA GTGTAGCGGG AGAGTGGAAAG TGAAAGTCCA GGAGGAGTGG GGAACGGTGT 240
GTAATAATGG CTGGAGCATG GAAGCGGTCT CTGTGATTG TAACCAGCTG GGATGTCCAA 300
CTGCTATCAA AGCCCTGGA TGGGCTAATT CCAGTGCAGG TTCTGGACGC ATTTGGATGG 360
ATCATGTTTC TTGTCGTGGG AATGAGTCAG CTCTTTGGGA TTGCAAACAT GATGGATGGG 420
GAAAGCATTA TTGCAATCAC AATGAAGATG CTGGCGTGAC ATGTTCTGAT GGATCAGATC 480
TGGAGCTAAG ACTTAGAGGT GGAGGCAGCC GCTGTGCTGG GACAGTTGAG GTGGAGATTC 540
AGAGACTGTT AGGGAAGGTG TGTGACAGAG GCTGGGGACT GAAAGAAGCT GAACTCGAG 599

```

(2) INFORMATION FOR SEQ ID NO:139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

```

GAATTCGGCC TTCATGGCCT AACCTTCCTG AATATCTGCC GTTGTCTCTG CAAGAAATAA 60
CTAGTCAACC CAAAAGGCAG TATCTTTTAC TTCTATTCCTT GAAGGAAATT ATTAGCTCTG 120
CATCAGTGGT GGGCCTTAAA CCATATGTTG AAAACATCTG GGCCTTATTA CTAAAGCACT 180
GTGAGTGTGC AGAGGAAGGA ACCAGAAATG TTGTTGCTGA ATGTCTAGGA AAACCTCACTC 240
TAATTGATCC AGAAACTCTC CTTCCACGGC TTAAGGGGTA CTTGATATCA GGCTCATCAT 300
ATGCCCCAAG CTCAGTGGTT ACGGCTGTGA AATTTACAAT TTCTGACCAT CCACAACCTA 360
TTGATCCACT GTTAAAGAAC TGCATAGGTG ATTCCTAAA AACTTTGGAA GACCCAGATT 420
TGAATGTGAG AAGAGTAGCC TTGGTCACAT TTAATTCAGC AGCACATAAC AAGCCATCAT 480
TAATAAGGGA TCTATTGGAT ACTGTTCTTC CACATCTTTA CAATGAAACA AAAGTCTCGA 540
G

```

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

```

CTTCATGGCC TAGTGGTTCT TCTGAAATCG GCCTTCAGAC ACCTGTCTT GGTAGTACCA 60
ATATCTAAGA AGTGGTTTCA GTTCAATTTT GTTTTCCTCC ATGCCAGAGA GAAGCCACAG 120
TTTCCTAAGC TGGGGAGGAG GTATATCCTT CAAGAGATCG GCTTGTTAGA ATAGACCACT 180
TAACACCATA TGAAAAAGCA ACAGACTGAA ACATGGATGT CCTCAAGAAG GGCTGCTGAC 240
ACCTATGATT TGGCAAGGAG ATAAATAACA GAATGTGCAA AGGGTCATAA GAGTGCAGAC 300
ACCCATAATG CTGTTGGCTG GAAGGTCAGA GCAGTTCACC AGTGAAAATG GGTACGCCAT 360
GAAGGCCGGC CTTCATGGCC TATAGGCCAT GAAGGCCGAA TTC 403

```

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

```

GAATTCGGCC TTCATGGCCT AGTCCTCATC TGCTGGCATT TTGTGGGGTG TTAGTGCCAA      60
ACTTGAATAG GGGCTGGGGT GCTGTCTTCC ACTGACACCC AAATCCAGAA TCCCTGGTCT      120
TGAGTCCCCA GAACTTTGCC TCTTGACTGT CCCTTCTCTT CCTACCTCCA TCCATGGAAA      180
ATTAGTTATT TTCTGATCCT TTCCCCTGCC TGGTCTAGCT CCTCTCCAAA CAGCCATGCC      240
CTCCAAATGC TAGAGACCTG GGCCCTGAAC CCTGTAGACA GATGCCCTCA GAATTGGGGC      300
ATGGGAGGGG GGCTGGGGGA CCCCATGATT CAGCCACGGA CTCCAATGCC CAGCTCCTCT      360
CCCCAAAACA ATCCCGACAA TCCCTTATCC CTACCCCAAC CCTTTGCGGC TCTGTACACA      420
TTTTTAAACC TGGCTCGAG                                     439

```

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

```

GCGATTGAAT TCTAGACCTG TGTGTCTAGC TGTGATGGAA TCTGAAATGA AGTTTGACAA      60
GGACCATGAT GGACTCATTG AAAATGGAGG CTATGCAGAC CAGACCTATG ATGGATGGGT      120
GACCACAGGC CCCAGTGCTT ACTGTGGAGG GCTGTGGCTG GCAGCTGTGG CTGTGATGGT      180
CCAGATGGCT GCTCTGTGTG GGGCACAGGA CATCCAGGAT AAGTTTCTT CTATCCTCAG      240
CCGGGGCCAA GAAGCCTATG AGAGACTGCT GTGGAATGGC CGCTTACTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

```

GAATTCGGCC TTCATGGCCT AGGGAGGCTG AGGTGGGAGG CTCACTGGAG GCCAGGAGTT      60
CGGAACCAGC CTGAGCAACA TAGGGAGACC TCAGCTCTAC AACTGAAAAA AAGATAGCCA      120
GGTGTGTTCA TGGTGGCACC TGTCTGTATT CCAGCCGCTT GGGAGGCTGA GGCAGGAGGT      180
TTGCTTGAGT CCAGGAGTTT GAGGTTGCGG TGAGCTACAC AATGAGCTAT GGTGGCACTA      240
CTACACTCCA GCCTGGGCCA TAGAGTAAGG CCCTGTCTCT AACTGGAAGT CCAAAGAGGG      300
ATCTACTTCC TAGACTATTA ATTTAATAGA TCAATAAATT AATCAAGAAT ATGATTTTTT      360
TCTCATCTTT CTCTGTAGTC ATATTTTATA CAGACTTTT GTTTAAGTAA TCTCTCTTTA      420
TGGGCAGACA ATGATTTTCA AACACCCCTG CCTCGAG                                     457

```

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

GAATTCGGCC	TTCATGGCCT	AGTCAGCCGT	GACTGCACCA	CCATACTCCA	GCCTGGGTGA	60
CAGAGCGAGA	TCTTGCTTTA	AAACAAAACA	AAACAAAACC	CAGACTTCCT	ATAATTCTTA	120
AAAATAAATG	TGGGTTTGAG	AGGCCTACCT	TGAAATGTAC	AAGATCCTGG	CCAGACTTCA	180
CCTATCTAAC	AATATGCTAG	TAACTATTTG	TTGACATGTC	TTAAAGAAAT	GTTTCATCAGG	240
GCCTCAGAAA	GCAAGGCAGA	GAACAGGTCC	CTGAAATTTA	CTAGCTTGCA	CCAAACCATC	300
AGATAAAGAT	AGGTTAATAT	TTGACAGAAA	AAACTCTTCA	AAAAGAGACA	GTGAAATACT	360
CTTGAGATGA	ATCCAGGCGG	CTCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

GAATTCGGCC	TTCATGGCCT	AGGCAGTGGA	GGCCTCTGTA	ATTCTAGCAT	ACAGGTGGCA	60
AGTTATTACA	TTATTTCTTT	CCTCCTGTCT	ACCTGCAGTT	GGTTTATGT	GGGGCGTTAG	120
TACACTTCCC	AAAGGGCTTG	CCCGCAGGTG	AGAGGTGCAC	ATTGAACTCC	CTCACCAGGC	180
AGATGGGAAG	TGTGGCCATG	AGAGAGAGCT	TCAGGGGCCC	TGGGTTTATG	ACATCGCTGG	240
GCCAGGAATG	AGGTTAATAT	TTTTAATGCC	GAAGGGTGAG	CCCCGTTATT	ACCCGAGCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

GAATTCGGCC	TTCATGGCCT	ACTGGATGGC	ATCTACTTCG	TATGACTATT	GCAGAGTGCC	60
CATGGAAGAC	GGGGATAAGC	GCTGTAAGCT	TCTGCTGGGG	ATAGGAATTC	TGGTGCTCCT	120
GATCATCGTG	ATTCTGGGGG	TGCCCTTGAT	TATCTTCACC	ATCAAGGCCA	ACAGCGAGGC	180
CTGCCGGGAC	GGCCTTCGGG	CAGTGATGGA	GTGTCGCAAT	GTCACCCATC	TCCTGCAACA	240
AGAGCTGACC	GAGGCCCAGA	AGGGCTTTCA	GGATGTGGAG	GCCCAGGCCG	CCACCTGCAA	300
CCACACTGTG	ATGGCCCTAA	TGGCTTCCCT	GGATGCAGAG	AAGGCCCAAG	GACAAAAGAA	360
AGTGGAACAA	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

```

GAATTCGGCC TTCATGGCCT AATGGAAAGG ACAAGGAAAA GGGAGAAGGG GTGAGAGTCT    60
GTCCTAGGGG CCAACGAGAA CAGTGAGCTG TTTCAGGGGA GCCATTTCTT TGTCCATGCT    120
CACAAGCCTG TGGATTCTTC CCCCTCTGCA GGAAATTACC TGATGTTCCA AACCCCTCC    180
AGATCCTGTA TATCCGCAGC ATCTCCCCTT TCCCTGAGCT GGAACAGTTT CTACAGGACA    240
CTATCAAGAG GTACTAGGGG CCTGGAGGTT TGGGCTCCAA GAGAAGCTTG ACAGAGCCCA    300
CGCCCGACCC CTACTTCTGT TTCTTCCTAA GGTATAATCT GCAGATGTTG GAAGCTGAGG    360
GCAGCATGAA GCAGGCCCTG GGTGAAGTGC AGGCACAGCA GCCCCCTCG AG            412

```

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

```

GCCTGGCCAT CCGGAGAGCT AAGAACCTCA GCGGCTGCT GTACGTNTCA TGCAACCCCC    60
GGGCAGCCAT GGGCAACTTT GTGGACCTCT GCAGAGCCCC ATCTAACCGG GTGAAGGGCA    120
TTCCCTTCCG GCCGGTCAAG GCTGTGGCAG TGGACCTGTT CCCGCAGACC CCTTCTTTTT    180
TCATACTTAT ATGAAAGACT ACATACTTAA AATACTGGTG ATTATATTTA GGACCTGAAA    240
TCATAAGATT GTGGTCTTGC TTTTACTTAA TTTTGTATC TTAGCGATGT CTAGAGTTAA    300
TAAGTGTGTC TTTTCTAATC ACAGCAAATC TCGAG                    335

```

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

```

GGATTCGGCC TTCATGGCCT AGTGGGGCAC TAGGATCATC ATTTGGGTGA GAGCCCTCGG    60
CAATGGTGGA GAGGGAGAAG TTATCATTGT GGAGCTCAGA TGGGGTCCGG AATTGTGTGG    120
TCCTACGCAG CTTGGTATTC TCCGTCTTGA GCAGGTAGAG CTTCTTGGA AAGAACACCG    180
TCATCATGAA GAGCAGGAGC AGGACGAGGG CAGCCGAGCC CACGGCCACG CACATCACCT    240
GGAAGTCGGT GATGATGGAC TCGCAGCGCA TCCCCTTGTT CCAGATGTAG TCCTGCGTGT    300
TGCACCTGCA GAAGGCCCCC ATGTTCTCCA CCAGGTAGCA CTGGCCGCCA TTGTGACAGT    360
AACTTGGGAA GAGGTGCGAC ACTGACCGGC AGGAGCCGTT ATGCCGCACA AAGCCACTGC    420
GGCACTCAGT GCCATTTTCA CTGGAGGCCA AGTCCCTGCC TGGCTCTCCT TAGGCCATGA    480
AG                                482

```

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

```

GTTCTTACT AACTTTAATG GCCACAACAT TTAGGCGAAA GGGGGGCAAT CATTGGTGGT      60
TTGGCATTTC CAGAGACTTC TGTCAGTTTC TGCTTGAAAT TTTCCCATTT TTAAGAGAAT      120
ATGGGAACAT TTCATATGAT CTCCATCAGC AAGATAGTGA AGATGCTGAA GAAACATCAG      180
TTCCAGAAGC TCCGAAAATT GCTCCAATAT TTGGAAAGAA GGCCAGAGTA GTTATAACCC      240
AGAGCCCTGG GAAATACGTT CCCCCCTCT CCTCGAG                                277

```

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

```

GCTCGCCAC TTTATGAAGA GCGATTTCAC GGCTGCTTGA ACCATTGCAA TTTGGATTG      60
TGTTTCAGCAC TTTAAAAGGT TCAACTTTTT GCTTCTACCC AGATTGGTCT CAGGTCTGTC      120
TTCTCCAGAT GACCGGTGGT TTCCTGAGCT GCATCTTGGG CTGGTGTCTG CCCCTGGCCT      180
ATGGCTTCCA -GCTGACCTG GTGCTGGTGG CGCTGGGGCC TGGCCATGGC CTGCAGGGCC      240
CCCACGCTGC ACTCCTGGCT ACAATACTCG AG                                272

```

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

```

GAATTCGGCC TTCATGGCCT AGGGGCGGTG AAACGTCCTG AAGAGCGTCC AGCTCGTGGC      60
CGAGAGGACT CGGGCGCTCC CCACGCTGGA GGCCGTGGAC CGCTCCCTTT AAAAGTTGAA      120
ACGGCCGCGG TTCGGGACGG CCTGGCGGGA GGAGGGCCCG ACGAGGGGAG GCTTCAGGGA      180
CAACTGGGGC TTCTCGACGT CCACCCTTTT CAGGGCGCGG CCCCCTAGC CCTCGGGCCG      240
GCCCAGGTAC AGGAGGTGCT TCCCGGGACC CCCGAGTAC CTGGAGGGAC CTCCCGAGGG      300
GACTCGAG                                308

```

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

GAATTCGGCC	TTCATGGCCT	ACAATCCCAA	ATGTAGGATC	ATGCCCATTG	CCCTAAGCCC	60
AGGCATGAGA	GTCGACATCT	CTCCTCTTAT	ATACAGATCC	AGTCCACAGG	TGAAGTGGGA	120
ACTCTCCAAC	CAGGATTCAG	CACACCATG	ATGTTGCGAC	TCCTCTACTG	GAACACAGCT	180
TGGAGAAGGG	ATTGGGGCTC	TCATGGCAGG	ATGCAATCCA	CTGTTGAGAT	TGTGACTCAT	240
GCACTTGAAC	CTAAGTCTCA	GGAGTTGTTG	ACTCTTACAC	CCAGCACCCA	GGTGATAGGA	300
CTCTCATGTC	TGGTTCCTGC	CCACGGTGA	AATTGTGACA	TATACATGGT	CACAGCTCAC	360
AGGTGAGGTG	ATAACTCACA	TACCTGGATC	CAGCTAAGAG	AACAGATTTT	GACTCTGATA	420
TCTTAGGCCA	TGAAGGCC					438

(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

GAATTCGGCT	TCATGGCCTA	CAAGATGACT	AAAGTCTTCA	CTCACCAAGG	AAAAGTGGCT	60
CTGTATGGCA	AGCTGGTGCA	GTCAGCTCAG	AATGAGAGGG	AGAACTTCA	AATAAGATA	120
GATGAGATGG	ATAAAATACT	TAAGAAGATC	GATAACTGCC	TCACTGAGAT	GGAAACAGAA	180
ACTAAGAATT	TGGAGGATGA	AGAGAAAAAC	AATCCTGTGG	AAGAATGGGA	TTCTGAAATG	240
AGAGCTGCAG	AAAAAGAATT	GGAACAGCTG	AAAAGTGAAG	AGGAGGATGC	TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

GAATTCGGCC	TTCATGGCCT	AAATTTAGGA	AGGTCAAACG	TGAATCTCCA	TTTGACAAAC	60
GTCCAACTGC	AGCAGAGATT	AAAGTGGAAAC	CCACCACTGA	GTCATTGGAC	AAAGAGGGCA	120
AAGGTGAAAT	TAGAAGCCTA	GTGGAGCCAC	TCAGTATGAT	CCAATTTGAT	GATACTGCTG	180
AGCCACAGAA	AGGAAAATA	AAAGGAAAGA	AACACCATAT	CTCTTCAGGA	ACTATCACAA	240
GCAAAGAAGA	AAAAACTGAA	GAGAAGGAAG	AGTTGACCAN	ACAAGTCAAG	TCTCATCAAC	300
TGTGTTAAATC	ACTCTCAAGA	GTGGCTAAAG	AGACTTCAGA	ATCTACCAGA	GTTCTAGAAA	360
GTCCAGATGG	CAAAGTGAA	CAGCGTAACC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

GAATTCGGCC	TTCATGGCCT	ACAGAGTACT	GAGTGGAAACA	TACGATGATA	GATTACAAA	60
TAATGTAGCA	TACTTCTACT	TCATTGTATC	TTAAGTTTCT	TGAAATATTG	CTACTGGAGA	120
TTGGAAAGAA	ATCTTAATGT	TATGGGGTAT	TGTCTAAGAA	GCTTTATTTT	AAAACCATCT	180
CATTAAATTT	TGTTGCATTT	TAGATAATCG	TCCCCAGATG	CCATGTTACC	CTAGTGCAGA	240
GTTTGGGGCT	GGATAAGTTT	TTGTTGTAGG	TGGCTATCCT	GTGTTTGTGA	GGGTATTTAG	300
CAGCATCCTG	GCCTTAAAC	AAAAATGTTT	TCAGACATTG	CCAAATGTCC	CCCGAGCGGT	360
AAAGTCACCC	CCAAGTTGAG	AACCGCTCTA	TACAAAGAGC	TGTTATTAGA	GCCAGACTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

GAATTCGGCC	TTCATGGCCT	AGATTGCTTG	AGGCCAGAAG	TTCAAGACAG	GCTGCCCAAC	60
ATAGTGAGAC	CCCCTTCTCT	ACCAAAATTT	TAAAAATGAG	CATGCATCTG	TAGTCTTAGC	120
TATTGGGAAG	GCTGAGGCAG	GAGGATCATC	TGAGCCCAGG	AGTTTGAGGC	TGCAGTGAGC	180
TAAGAAGGTG	CCACTGCACT	GCTGTTGTCT	CTCAGCAGAT	CATTTTCAGC	TTTCTTTGGA	240
GAGTAGCCAT	TAGCAATGCA	AATGTGAAGT	TTGATAGCAC	AATAAATAAA	ACACTGAAAA	300
CTGTAGATGT	TACTTATAAA	ACACTGGCAC	TCAGATAAAT	TGGGTTTGGT	CAAGAAGACA	360
GTGAAGCATA	TCCCTGTTGG	GCCAGAGGCT	GTTATCGTTT	TGCTCTGAAT	TCAAAACCTG	420
ATATGTCTCC	AAATTTGCTT	AGGGTTGTTA	TCCTGGAAAA	TAGAATCTGA	TAGAAGGTGG	480
GCACATCTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCGGCC	TTCATGGCCT	ACTGCTTTCG	TGAAGACAAG	ATGAAGTTCA	CAATTGTCTT	60
TGCTGGACTT	CTTGGAGTCT	TTCTAGCTCC	TGCCCTAGCT	AACTATAATA	TCAACGTCAA	120
TGATGACAAC	AACAATGCTG	GAAGTGGGCA	GCAGTCAGTG	AGTGTCAACA	ATGAACACAA	180
TGTGGCCAAT	GTTGACAATA	ACAACGGATG	GGACTCCTGG	AATTCCATCT	GGGATTATGG	240
AAATGGCTTT	GCTGCAACCA	GACTCTTTCA	AAAGAAGACA	TGCATTGTGC	ACAAAATGAA	300
CAAGGAAGTC	ATGCCCTCCA	TTCAATCCCT	TGATGCACTG	GTCAAGGAAA	AGAAGCTTCA	360
GGGTAAGGGA	CCAGGAGGAC	CACCTCCCAA	GGGCCTGATG	TACTCAGTCA	ACCCAAACAA	420
AGTCGATGAC	CTGAGCAAGT	TCGGAAAAAA	CATTGCAAAC	ATGTGTCGTG	GGATTCCAAC	480
ATACATGGCT	CAGGAGATGC	TCGAG				505

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

GAATTCGGCC	AAAGAGGCCT	AGCCGGAGCA	GCTGTCTGGG	AGTCAAGGCT	GCAGTAGCGT	60
TTCTTCATGG	GGTGCTCCAG	GGGGTGCCAC	AGACCGACAG	GCAGCCCAAG	GGCCTGGACA	120
CCCCTCCCCA	GGCAGGTGCT	GGCCCAGGAG	GACTGTCTCT	GGGAATGAAC	CTCCCGCGGG	180
CTTTGGACTG	AGGTCCCTGT	GGCCTCGGTC	TCCTCCCAT	GAAGTGGGAG	CGAGGCTCCC	240
CAATGGTGCT	TTTGGCTTTA	GTGTACGATG	TTTGTGTGTC	TTCCCGCCGT	GGAGGGCAGA	300
GCCACCCAC	ATCAGGATCG	GACGTGCTAC	CCCTCCCGGT	CCCGGCCCTG	GCCAGCCAG	360
CCCAGCCCTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 362 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

GAATTCGGCA	AAGAGGCCTA	ATGAATTCTC	TGATCACAAA	ACAGACCCAG	GAAAGCATTG	60
AGCATTTTGA	GCGACAGGCA	GGGCTGAGAG	ATGCTGGCTA	CACACCCAC	AAGGGCCTCA	120
CCACCGAGGA	GACCAAGTAC	CTTCGAGTGG	CCGAAGCACT	CCACAACTA	AAGTTACAGA	180
GTGGAGAGGT	AACAAAGAA	GAGAGGCAGC	CTGCATCAGC	CCAGTCCACC	CCAAGCACCA	240
CTCCGCACTC	TTACCTAAG	CAGAGGCCCA	GGGGCTGGTT	CACTTCTGGT	TCTTCCACAG	300
CCTTACCTGG	CCCAAATCCT	AGCACCATGG	ACTCTGGAAG	TGGGGATAAG	GACGGGCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

GAATTCGGCC	AAAGAGGCCT	AGTTTTACAA	AACGCGATTT	GTAATATAAA	CTAGTTAGAT	60
AACTCAGAGG	GTTTTATTGG	CCATATTTT	GTTTATGCTT	TGTCACAGGC	TTTAGTCATT	120
GCTTCCATGT	GTTTTCATCC	TTCAGGATAT	CTTCAAGAAG	CCTACTTATG	GACCAAACAA	180
GTCTGACCA	TCATGGAGAA	ATCTCTGGTC	TTGCTCAGGG	AGGTGACGGA	TGGCTCCCTC	240
TATGAAGGAG	TTGCGTATGG	CAGCTACACC	ACTAGATCAC	TCTTCCAATA	CATGTTTCTC	300
GTCCAGAGGC	ACTTCAACAT	CAACCACTT	GGCCATCCGT	GGCTTAAACA	ACACTTTGCA	360
TTTATGTATA	GAACCATCCT	GCCAGGTATA	GTGAGGAGTC	AGAAGTGTA	AAACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```
GAATTCGGCC AAAGAGGCCT ACAGGTAGTA TCTTTATAGC GGTATAAAAA CAGACTAATA    60
CAAACAGGTA GCTCTAAATT GTGAGTTTTT CTAACTCCT TTGATCTTCT GTGATAGCGA    120
TTTTTCACAT TTCACACTTC CCTAATGCCA AAAATCCACC TCCAGCAGCT GTTTTGCCTC    180
TTTCTTATCC TGCCCCTTGG AAGAATGTCA TCATTATTGC TGCCACAGCA CTGTGTTCTT    240
TTTCAGAAGT TACAGCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:163:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```
GAATTCGGCC AAAGAGGCCT AGTGGTCTGG GCAAAATTT AGTAAGACCT GGAAAGCATA    60
GGTAATCAAA GCAGAACTG ACAAATGAGA TGGTATCAAG CTAAAAAG                108
```

(2) INFORMATION FOR SEQ ID NO:164:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```
GAATTCGGCC AAAGAGGCCT AGTTTAACTT CATCAGACAT TATTGCAGCC AGCTGTCAGC    60
CAAGCTCAGT AACCTTCCAA CGCTCATTTT CATGAGGCTA GAGTCCCTGA GAATCCTCTG    120
TAGCCATGAG CATTACCTCA ATCTGAACCT TTTTTTTATG AATGCTGATA CTGCTCCAAC    180
ATCTCCTTGT CCTCCATAT CTTCACAGAA CTCAAGCTCC TGCTCCAGCT TCCAGGACCA    240
GAAGATCGCC AGCATGTTCT ATCTGACTTC CGAGTACCGC CAGCCCCTCG AG                292
```

(2) INFORMATION FOR SEQ ID NO:165:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 135 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

GAATTCGGCC AAAGAGGCCT AGCAAAACT GTTCAAAAGA GTTGTGATT ACTTTCATT	60
CCACTTTCCT ACCCCCATTC TCCCTCAAT TAACTCTCT TCATCCCCAT GATGCCATTA	120
TGTGGATTCC TCGAG	135

(2) INFORMATION FOR SEQ ID NO:166:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 449 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

GAATTCGGCC AAAGAGGCCT AGAAAAAGTA GCACAGTGGA GTCTGAAATA GCAAGCGAAG	60
AGAAAAGCAG AGCTGCTGAG AGGAAAAGGA TTATTATTAA GATGGAGCCA GAAGATATTC	120
CTACAGATGA ACTGAAAGAC TTTAACATTA TTAAAGTTAC TGATAAAGAC TCTAATGAAT	180
CCACTGACAA TGATGAATTA GAAGATGAAC CTGAAGAGCC ATTTTATAGA TACTATGTTG	240
AAGAAGATGT CAGCATAAAA AAAAGTGGTA GGAAGACTCT AAAACCTCGA ATGTCAGTAA	300
GTGCTGATGA AAGAGGTGGT TTAGAGAATA TGAGGCCCCC TAACAACAGC AGTCCAGTAC	360
AAGAGGATGC TGAAAATGCA TCTTGTGAGC TGTGTGGACT TACAATAACC GAGGAGGACC	420
TGTCATCTCA TTACTTAGCC AAACTCGAG	449

(2) INFORMATION FOR SEQ ID NO:167:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 565 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

GAATTCGGCC AAAGAGGCCT AAAAGGAAAC TTGGACAAGT AGAAAGTGA TGACCCAGGC	60
TCCGTTACAT ATACTTGAT TCCAGCTGGG ACCTAGATT TCTGAGGACG GAAGCCAAGG	120
AGACAGGAAC ATGTGGCTGC TCCAGCTCT ACTCCTTCTC TGCCTCTCAG GCTGTTGTG	180
TCTGAACGGC CCCGCTCTG TGAAGGACAC TGCGGGGGAC TCTCTGACAG TGTGGTGTC	240
GTATGAGAGC ATGTACAAGG GATATAACAA GTACTGGTGC CGAGGACAGT ACGACACGTC	300
ATGTGAGAGC ATTGTGGAGA CCAAGGGAGA AGAGAAGGTG GAGAGGAATG GCCGCGTGC	360
CATCAGAGAC CACCCGAGG CTCTCGCCTT CACTGTGACC ATGCAGAACC TCAATGAAGA	420
TGATGCTGGA TCTTACTGGT GCAAAATTCA GACAGTGTGG GTCCTGGATT CATGGTCACG	480
CGATCCCTCG GACCTGGTTA GGGTGTATGT TTCCCCAGCA ATTACAACCC CAAGGAGGAC	540
CACACATCCA GCCACCCCGC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:168:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 158 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

GAATTCGGCC AAAGAGGCCT AGTTTCCTTT ATATGTTTGC ACTTAATTTG ATTCCATCCT	60
TCATGCTGTT TTCATTATTC TTAGTTCATC TACACCACAT AAATTATCAC CTTTGTTCCT	120
AGTTCCCCAA TTTCCATGTG CCACAAACAA ATCTCGAG	158

(2) INFORMATION FOR SEQ ID NO:169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

GAATTCGGCC AAAGAGGCCT AGTCTCACCA TCTATTCTAA ACCTTATATT ATCAATCCTA	60
TTCCCTCTCA CCAAAAGAAT CCCTTTATAC AAGTAATTAT CCTGTCTATG TCTTTCAACT	120
CTAGTTTCCT CACTGCAACT CTTCCCTTAA TATATGTACC TGCTCTGTTA TCCCTCTCCA	180
GCTACTTCCC TATTTTCTGT TCCCCTTTAC AGGAAACTT TTCTCCAGCA TTTCCCAATG	240
CCATTGTCCT ACTTCCTCAC ATTCTATTTT CTCTCAAAC CATTTTTATT AGGCTTCTTT	300
CCCCAATGGC TATTGTCAAG CTTCACTTAA TGCCGTGCAA ATCACCCTAT TCTCCAGGTC	360
TTCTTTCTTC CCAGTCTCTC GAG	383

(2) INFORMATION FOR SEQ ID NO:170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

GAATTCGGCC AAAGAGGCCT AAATATTGTC TGAAAAAAT ATATGAGACC CATTACTCAG	60
TCTCTCCTCC TGCCATTTAT ACTGCAGGTA TTCCCCAAGT TTCTCTTCTC AACCTTTGCC	120
TCCTTTTCCC TGCTTGCTCC CTTAGTTTTC TCCTCTGGGT GGATGACTCC CAAATCTAGC	180
ACTGACCTGT TTGTCCACAT CCTTGAGTAT CCCACCACCA TTTACACCC AGCATATCCA	240
GATGGAGCTC TTATCAGTTG TAACAGCACT GCTCAATTCT AG	282

(2) INFORMATION FOR SEQ ID NO:171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

GAATTCGGCC AAAGAGGCCT AGTGGAAGAG AAGAATGTTT CTGTCTCTTC CTACGTTGAC	60
TGTTCTTATT CCACTGGTTT CTTTAGCAGG ACTGTTCTAC TCAGCCTCTG TGGAAGAAAA	120
CTTCCCACAG GGCTGCACTA GCACAGCCAG CCTTGCTTT TACAGCCTGC TCTTGCCTAT	180
TACCATACCA GTGTATGTAT TCTTCCACCT TTGACTTGG ATGGGTATTA AACTCTTCAG	240

GCATAATTGA TGCAACTAGA GTCAATATGC TGTATATATT AATGATAGCT CTTGGGCATC 300
GATCTCTGAA AGCTCAAATG GATGGAATTT AGTTTGC GGG AACTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:172:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

GAATTCGGCC AAAGAGGCCT AGGGGTGTAC ATTTTATTGG AAACCTTAAA TACTGTTTCAG 60
AAAGAATATA TCTTCAATCA AGGCTCTTGT GCAGCCTACA CAGAAAAATG AAGCTTTTTG 120
GGTTAGGTGC AACGCTCGAG 140

(2) INFORMATION FOR SEQ ID NO:173:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

GTGGTCTCTC CTCCCCTGCC ACTCCCCTCT TCTTTTTTTT CCAACATGGC CTTGCTCCGC 60
GTACATCGCC ACCCAGGGAC CGCTGCCCGC CACCGTGGCT GACTTTTGGC AGATGGTGTG 120
GGAGAGCGGC TGCCTGGTGA TCGTCATGCT GACACCCCTC GCGGAGAACG GCGTCCGGCA 180
GTGCTACCAC TACTGGCCGG ATGAAGGCTC CAATCTCTAC CACATCTATG AGGTGAACCT 240
GGTCTCCGAG CACATCTGGT GTGAGGACTT CCTGGTGAGG AGCTTCTATC TGAAGAACCT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:174:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 188 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

GCGATTGAAT TCTAGACCTG CCTCTCTTAT ACCTCGGTGT GGCCGAAAGG AAATAAGCAG 60
AGGCGCTATT GGCAGGACCT AGAAACTTTC CTTGTAACAT AGCTAGTATG TTCCCTCTGC 120
CCCTTCTTCA TCTTTTCCTC ACACTTGCTG GAGCTGGAGC AGCTATCCTG ACCGCAGGTG 180
CACTCGAG 188

(2) INFORMATION FOR SEQ ID NO:175:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 274 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

GAATTCGGCC	TTCATGGCCT	ACTATCTGCC	TTGCGCTCCC	ACTGCCCTGA	CCTGTGCCCT	60
CTCACAGGCC	CCCGTGATGG	CTCGCTGGCC	TCCCTTCGGC	CTCTGCCTCC	TCCTGCTGCT	120
GCTGTCCCCA	CCGCCACTGC	CCTTGACAGG	GGCCCATCGC	TTCTCCGCAC	CTAATACCAC	180
TCTCAACCAC	TTGGCACTGG	CACCTGGCCG	AGGCACACTC	TATGTCGGCG	CAGTGAACCG	240
CCTCTTCCAG	CTCAGCCCCG	AGCTGCAGCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 327 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

GGTCAGCCGA	GCATGATAGG	AGACATCATC	AACCTCGGCC	TGAAAGGGAG	GGAGGGGAGA	60
GCAAAGGTCG	TCAACGTGGA	GATCGTGGAG	GAGCCCGTGA	GTTATGTCAG	CGGGGAGAAG	120
CCGGAGGAGT	TTTCCGTCCC	ATTCAAAGTG	GAGGAGGTCG	AAGATGTGTC	GCCAGGCCCC	180
TGGGGGTTGG	TTAAGGAGGA	GGAAGGTTAT	GGAGAAAGCG	ATGTCACATT	CTCAGTTAAT	240
CAGCATCGAA	GGACCAAGCA	GCCTCAGGAG	AACACGACTC	ACGTGGAAGA	AGTGACAGAG	300
GCAGGTGATT	CAGTGGGCGA	GCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 408 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

GAATTCGGCC	AAAGAGGCCT	AAGCAATGTC	TCCACCACTG	CTGCTGCTAC	CCTTGCTGCT	60
GCTGCTGCCT	CTGCTGAATG	TGGAGCCTGC	TGGGGCCACA	CTGATCCGGA	TCCCTCTTCG	120
TCAAGTCCAC	CCTGGACGCA	GGACCCTGAA	CTACTGAGGG	GATGGGGAAA	ACCAGCAGAG	180
CTCCCCAAGT	TGGGGGCCCC	ATCCCCTGGG	GACAAGCCTG	CCTCGGTACC	TCTCTCCAAA	240
TTCTTGATG	CCCAGTATTT	TGGGGAAATT	GGGCTGGGAA	CGCCTCCACA	AACTTCACT	300
GTTGCCTTTG	ACACTGGCTC	CTCCAATCTC	TGGGTCCCGT	CCAGGAGATG	CCACTTCTTC	360
AGTGTGCCCT	GCTGGTTCCA	CCACCGCTTC	AATCCCAATG	TCCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 305 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

GAATTCGGCC	AAAGAGGCCT	AGGAGGAATT	TCCATCTTGC	TCTCAAAGTG	AGTCTGAATG	60
TGCTCGGTGG	TGTCACCCCC	GCCGAGCTGC	CAGTGCAGAA	GGCCACTATT	GAACTCCTGC	120
ACACGCCCCA	ACTTGTCTAGA	TCGGTCAACA	ACAAACAGGT	TGTTCTTTTT	GACTATCTTT	180
ATTGGCAGCT	TGTCGAACTT	ACTGGCTTGC	TTGGGCTTCT	CCTTTGGGTC	TGCAGCGGCG	240
TCCGGGGCAG	TCAGAGCGAT	GCTGCTCTTT	TCATCGCTTT	CTGTCTTCTC	GCTGTCTACC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

GAATTCGGCC	AAAGAGGCCT	AGTGCAGCAA	TTTAGAGAGT	GTCTCAGGAG	TGTGGCTCAC	60
TGGCAGCTGC	AGCTATGTTA	GTGCTTCTTT	CTGCCTCAAG	TTCAGAAACA	AGCTGGACTA	120
TCTCAGGGTG	ATTGAATTTT	CCTGCTGTGG	AATCATAGAA	GTCTTGCAAT	CTCCAGGTT	180
TGTGTTCAAG	GTCTTCATAT	TCAGATGCTT	GAAGAATCAT	TTCACATTGG	TCTAGCATTC	240
AATCGAG						247

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

GAATTCGGCC	AAAGAGGCCT	AGTCAAGTTC	ATTCCCAGA	GTCTTAAGAC	TAAGTTCTGC	60
CTCCTCATTG	CAGGTGTGCC	GAGAGTTTTT	TTTGAACAAC	AAAAATTACT	AAGGAACCTC	120
ACTACCTTTG	GCGGTAGAAT	TAGAAAACAG	ATTCAGCAGT	CACCTACTCC	CCTTCAGTAA	180
TTCGAGACAA	TTATTTTTCT	CCTGACACAA	CATCAGGTCC	CATGAAAAAT	GACACCGTGC	240
CTGGTGTITT	TGGGTTCTTT	AATGCTTCTT	TTAGAGCCAC	ATTTTTCTTT	TCAAACCGAG	300
TTCCCATCGC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

```

GAATTCGGCC AAAGAGGCCT AATTTTCTT CACGTTCTT ATCACCACCA TGTTATGTT      60
GGCTGCCCTG GCTCACCATT TGTTTACTG GGATGTTTG TTTATATATA ATGTGTGTTT      120
AGCTAAGGTA AAAGGCTACA GGTCTCTTC CACATCCCAA ACTTTCTATG ATGCTTACAT      180
TTCTTATGAC ACCAAAGATG CCTCTGTTAC TGACTGGGTG ATAAATGAGC TGCCTACCA      240
CCTTGAAGAG AGCCGAGACA AAAACGTTCT CCTTTGTCTA GAGGAGAGGG ATTGGGACCC      300
GGGATTGGCC ATCATCGACA ACCTCGAG      328

```

(2) INFORMATION FOR SEQ ID NO:182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

```

GAATTCGGCC AAAGAGGCCT AGTTGTGGAA AAGAAAGACT GTGAGGGTAG GCACAAGAGC      60
ACTCAAATGT CCCAGGTAGA GAAAACAACA TGTATGATGG CCCAGAAGGA GGCAAGTCTC      120
GAG      123

```

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

```

GAATTCGGCC AAAGAGGCCT ACTTGGACAA GTAGAAAGTG GATGACCCAG GCTCCGTTAC      60
ATATACTTGG ATTCCAGCTG GGACCTAGAT TTGCTGAGGA CGGAAGCCAA GGACACAGGA      120
ACATGTGGCT GCTCCCAGCT CTA CTCTCTC TCTGCCTCTC AGGCTGTTTG TCTCTGAAGG      180
GCCCCGGCTC TGTGACTGGC ACTGCGGGGG ACTCTCTGAC AGTGTGGTGT CAGTATGAGA      240
GCATGTACAA GGGATATAAC AAGTACTGGT GCCGAGGACA GTACGACACG TCATGTGAGA      300
GCTCACTCGA G      311

```

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

```

GAATTCGGCC AAAGAGGCCT AGTTCAATCT GTAACAAGCC TTCTTCAATT TCCTCTCCAC      60
ATACCCTGCA TAGACTTTAA GATTCCTCTG CTCGATGCTA ATAAGAAGAC ACACACCCCT      120

```

CGTTCTCGAG

130

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

GAATTCGGCC	AAAGAGGCCT	AGGAGGGGGA	AGAGAGTCCG	TTTTGCAGAA	GATGAAGAAA	60
AGAGTGAAAA	TTCTCTGGAG	GACGGTGACA	TAACGGATAA	GAGTCTTGT	GGAAAGTGGTG	120
AAAAGTACAT	CCCACCTCAT	GTGAGGCAAG	CTGAGGAGAC	AGTGGACTTC	AAGAAAAAGG	180
AAGAACTAGA	AAGCTTGAAG	AAACATGTAA	AAGGTCTACT	TAACAGGTTG	AGTGAACCCA	240
ACATGGCTTC	CATCAGTGGG	CAGCTGGAGG	AACTGTACAT	GGCCACAGC	AGAAAGGACA	300
TGAATGACAC	CCTGACCTCC	GCTCTCATGG	GTGCCTGCGT	CACTGCCTCG	GCCATGCCCA	360
GCAGACTGAT	GATGGAGCAT	GTTCTCTTAG	TCAGCATCCT	TCACCACTTA	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

GAATTCGGCC	AAAGAGGCCT	ACTACATTTT	TACCTAAATT	TATAGAAAAT	CAATTCGGAT	60
TGACATCCAG	CTTCGCAGCT	ACTCTTGAG	GGGTGTTTT	AATTCCTGGA	GCTGCTCTCG	120
GTCAAATTTT	AGGTGGCTTC	CTTGTTTCAA	AATTCAGAAT	GACATGTAAA	AACACAATGA	180
AGTTTGCACT	GTTACATCT	GGAGTTGCAC	TTACCTGAG	TTTGTTATTT	ATGTATGCCA	240
AATGTGAAAA	TGAGCCATTT	GCTGGTGTAT	CTGAATCATA	TAATGGGACT	GGAGAATTGG	300
GAAACTTGAT	AGCCCCTTGT	AATGCCAATT	GTAACGTACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

GAATTCGGCA	AGAGCCTAAA	ATCTACAAGC	ACCAGGAAGT	CAAGATGCAA	GCACCAGCCT	60
TCAGGGACAA	GAACAGGGG	GTCTCAGCCA	AGAATCAAGG	TGCCCATGAC	CCAGACTATG	120
AGAATATCAC	CTTGGCCTTC	AAAAATCAGG	ACCATGCAAA	GGGTGGTCAT	TCACGACCCA	180
CGAGCCAAGT	CCCAGCCCAG	TGCAGGCCGC	CCTCAGACTC	CACCCAGGTC	CCCTGCTGGT	240
TGTACAGAGC	CATCCTGAGC	CTGTACATCC	TCCTGGCCCT	GGCCTTTGTC	CTCTGCATCA	300
TCCTGTCCAGC	CTTCATCATG	GTGAAGAATG	CTGAGATGTC	CAAGGAGCTG	CTGGGCTTTA	360

AAAGGGAGCT TTGGAATGTC TCAAACCTCCG TACAAGCATG CGAAGAGAGA CAGAAGAGAG	420
GCTGGGATTC CGTTCAGCAG AGCATCACCA TGGTCAGGAG CAAGATTGAT AGATTAGAGC	480
GACTCGAG	488

(2) INFORMATION FOR SEQ ID NO:188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

GAATTCGGCC AAAGAGGCCT AGGTCAGATG CATTAAAACA TATCAAAATG TTACAAAAAT	60
GTATGGCTCC CTTGCTGAGG CCCTGTCAGA TTATGTTAGA TGAGTAAACG CATCAGTGTG	120
TAAGTTCAGA ACCAAACGTT GAATCAAGTC ATGTACTCTC GAG	163

(2) INFORMATION FOR SEQ ID NO:189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

GAATTCGGCC AAAGAGGCCT ACCTGCTCAT ACCTGTGGCC AAAAGCATGA TGCCCCAGGC	60
TCTGCCTCCA ATTCTACCAT CTTCTTCCAT CTTTCTCTTT TATCAGGTCT CTGCCCTCCT	120
GTA CTTTGTGTA CTTAGATTCT CCTCTGCCAA GCCCATTCAG ACTGTGACTG GTAGGAGTGC	180
TGTGCTCAGC TTTCCACTTG AGTGTATTATC CAAGAAGTTG GATAACCCTC TCAAGTTATG	240
GCCTCCATTC CAGTGGCGCT CAGTCTATGG GGATGCATTC CACTCACCTC TGGGCCTAGG	300
GCAGGTCGAG	310

(2) INFORMATION FOR SEQ ID NO:190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

GAATTCGGCC TTCATGGCCT AGGGCCTCAG TCTTTTTACT TTTGCGGCTG TGTTTCTCTG	60
AAGGCTTGGC ATTAGTAGAT TGAAAAGAAT AACCATCTAG GGAAATGTGA ATTCAAGTTT	120
TTTCTGACAT TCTGCTCTCT ACAAGGGGAT ATTATGTACA CATAAACCTA CTTCCAAAAT	180
AATGAAGTGA GGCCTAATTC CTTACTCTTC AGAGAGCCCA CTGTGGAAGT GTCAGTGACC	240
TTGTGTATGG GCTGCCCTTC ATGGCTCTGG GAGTCATTAT AAAGGGCAGC ATTTGGCGTG	300
GTGCGTCCTA AGCCAGTGTT TCTCGGCTCT GTTCCTTAA CATGTGTTAG TGTTAATAGA	360
TGTTCTTGGA AAAAAAAAAA AAAAAACAGC ATTCTGAGGT CAAACATGCT CAGAAAGCTT	420
GGAATCTGCA CTACGCTTCT CGTACACATT TCATATTAA GATTTTGGA AGTCCTGCAA	480

TACAGAGCCC TGTCTAATAT TGCCACAGCC CTCGAG

516

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

GAATTCGGCC TTCATGGCCT ACTTGCTAGA TAGACAGATT AAGAATGTTG AAGACATGGT	60
CCAGTTTATT AATAACATTT TGGATGGCAC AGTAGAAGCC CAAGGAGGTG ATAGCATTTT	120
GCAGAGATTG AAAAGAATAG TATTTGATGC CAAATCTACT ATTGTGTCTA TATTCAAGAG	180
CTCACCAC TG GGGCTGCT TTCTCTTTGG CCTGCCACTG GGTGTCATCA GTATCATGTG	240
CTATGGAATC TACACAGCCG ACACAGATGG AGGTTATATA GAAGAACGAT ATGAAGTGTC	300
TAAAAGTGAA AATCTCGAG	319

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

GAATTCGGCC TTCATGGCCT AAGCAGAAGG ACATATTAGA GAAGGATTGT ATAGTTTCT	60
GGTAAAGAT GACAGTGAAT TGTATGGCG ATGGATTAGC CGTGGAGGT GTTGAGTATA	120
AGTGGTCTCC AGCCAACTC TATGGTTACT GGAATAAGAG AGTAGGAACC TTCTCAGGCT	180
TTATCTTTAT CTATTCTTGT CAACAGTATG TACATGTGTC CCCCAGCCCC AAATAACTGT	240
ACAGTTTAAT GATGTTCACT CTATACAGTT CCCAGAATCC ATTGGAAATT GCTGTAACAG	300
CATATCTCA ATGCCCATCA ATTCTCCACG TCCAATTCT CCATGGCCTC CTCTGCCTCT	360
GCTGATCTGT GAACTTCTCG AG	382

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

GAATTCGGCC TTCATGGCCT AATATTTTAA AAGCGAAAGC TAACTTCTAA TTTTGAAAAT	60
TTTTATTGGG AGCAGGATAT TATAATAATA ATCTTTAGTT GTTAAACCAT TAAACATCAA	120
GGTTTTTTAC ATTGTTTCTA TGCCTCCTCC CTCAAAAAAA AAAAACCTCC TACAATAAAA	180
CTGAAAAATT GCACAAAGAC ATATTAGTGG AAGACCACTG CTCGTTTAC ACAAATGAAG	240
AGTATAAAGC AGAGAAGTGC TCCTTGGGGC AAAAGGCAAT TGGCAAAAAG CTAAGGAACA	300
TTTTCATAAT GAATTAGAAA TACAGATCAT CAGGAATATC CAGGAAGCGA TAGTGAATAC	360

CAGGCAGGCT TAAGAGACAG GAAACATTTA GCATGTTGGT AAACCACTTT AGCACATCAG 420
 CAAAAGCATA TAAACAGCTT TAGGATTGGA AATTATTGCC AGGGGGGACT CGAG 474

(2) INFORMATION FOR SEQ ID NO:194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC TTCATGGCCT ACGTNNCTAT GTCTTCAAGC ACAGAGGTGT CCAGGTGTAT 60
 TGCACATCTT CATCGCACTG AGCTGCATGG ACAGCTGATT TCTGTGAAA AAGTATAAGG 120
 TGATCCCTCT CAGAAAGAAA TGAAGAAAGA AAATGATGAA AAGAGTAGTT CAAGAAGTTC 180
 TGGAGATAAA AAAAATACGA GTGATAGAAG TAGCAAGACA CAAGCCTCTG TCAAAAAAGA 240
 AGAGAAAAGA TCGTCTGAGA AATCTGAAA AAAAGAAAAGC AAGGATACTA AGAAAATAGA 300
 AGGTAAAGAT GAGAAGAATG ATAATGGAGC AAGTGGCCAA ACATCAGAAT CGATTAAAAA 360
 AAGTGAAGAA AAGAAGCGAA TAAGTTCCAA GAGTCCAGGA CATATGGTAA TACTAGACCA 420
 AACTAAAGGA GATCATTGTA GACCATCAAG AAGAGGAAGA TATGAGAAA TTCATGGAAG 480
 AAGTAAGCAA ATGCTCGAG 499

(2) INFORMATION FOR SEQ ID NO:195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC TTCATGGCCT AAGCAAAAGA GCATTAAGAA GTGTCTGTTT TTGTTATTGC 60
 CATTTCATAA ATATTTTAGT AGGTGTTCAA TTTCATTGGA TATTCTTTT TTTTAATTGT 120
 CTTTGTACCT ATGATTGAAA ACAGTAGTTG GTCTATGACT TTGAGGAGA GGGAGAACCG 180
 AAGATTACAG GAGGCCAGCA TGAGTTGGA ACAAGAGAAT GATGACCTTG CCCATGAAC 240
 AGTAACAAGC AAAATTGCTC TACGGAATGA CTTGGATCAG GCAGAAGACA AGGCAGATGT 300
 GTTGAATAAA GAGCTCCTTT TGACCAAAC CCTCGAG 337

(2) INFORMATION FOR SEQ ID NO:196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCGGCT TCATGGCCTA AAGGAACTG ACAAATTATC CCCAGCTGCC AGAAGAAGAA 60
 ATCCTCACTG GACGGCTTCC TGTTTCCTGT GGTTCATTAT CTGATTGGCT GCAGGGATGA 120
 AAGTTTTTAA GTTCATAGGA CTGATGATCC TCCTCACCTC TCGGTTTTCA GCCGGTTGAG 180

GACAAAGTCC AATGACTGTG CTGTGCTCCA TAGACTGGTT CATGGTCACA GTGCACCCCT	240
TCATGCTAAA CAACGATGTG TGTGTACACT TTCATGAACT ACACTTGGGC CTGGGTGGCC	300
CCCCAAACCA TGTTCAAGCA CACGCTACC AGTTCACCTA CCGTGTTACT GAATGTGGCA	360
TCAGGGCCAA AGCTGTCATC CTCGAG	386

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC TTCATGGCCT AGTTTTTGTC TTTTTTCTT TTTGGTATT ATTTGTTTG	60
CCACTTATTC CTAAAATTCA TATTGCTATT AACCGTACAC ATCTTCCAT GTTCTTATAA	120
TAATCTACAA ACATCTCTCC CTTTCTGTAG CTCTCTCTGT CACACACACA CACATGCACA	180
CACGCACACA CACACACACA CACACGCTGT GCACTCTCCT GAAGCATGTG TGTACATACA	240
TACATATGTG AGGGGTTTTA TGAAGTCTTT ACCAAATTGT GTTCTTAATA TATACAATGT	300
TGGCTTCTTT TTAGCCATTC AGAAGTTATT TCAGTCATGG AATGATCTCT AGCCATATAA	360
CTGAAAACAG GTAAGTTTCT TTCTTGGGGA AGAAGGGCGA ATGGTGATAG AGAAAATGGA	420
GAGCTCGAG	429

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAATTCGGCC TTCATGGCCT ACCAAGCTAT GCAGGAACAG TTGTCTAAGA ACAAAGAACT	60
GACACAGAAA CTCCAGGTAG CCTCTGAGAG TGAGGAAGAG GAGGGAGGCA CAGAAGATGT	120
GGAAGAAGCTC CTTGTCCCTG ATGTAGTGAA TGAAGTGCAG ATGAATGCAG ATGGGCCGAA	180
TCCCTGGATG CTCAGGAGCT GCACCAAGAG CACCAAGAG GCTGCAACCC AGGAGGACCC	240
TGAGCAACTG CCAGAGCTTG AGGCCATGG AGTTTCTGAA AGTGAGGGAG AAGAAAGACC	300
AGTGGCAGAA GAAGAAATTT TGTGAGAGA ATTTGAAGAA AGGCTCGAG	349

(2) INFORMATION FOR SEQ ID NO:199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC TTCATGGCCT AGGGAAAGCT CCAACTTGCT TTACCTTTCT AAGATATCCC	60
ATTTTCTCTA TACCATTGTG TGAATAATAT ATCTCTTGCC CACTGGTTTG TAACAGTGCC	120

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TTAATTAGTT TTTGTGTTTG AAGTTCAGAG ATCTCTTCCT GGCCTATGTA TTGTGTTCCG      180
TTGATGGATC TTTCCATCCC ATGGTACCCT TTACTATTAT TGTCTTCATT TTTATTACTA      240
TTGTTATGCC CTTTCTCTC TCCGTGCACA TCTTCATGTT TGAACCTCTAA AAACACACCG      300
CCAACGCTCG AG                                          312

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(2) INFORMATION FOR SEQ ID NO:200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

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GAATTCGGCC TTCATGGCCT AATATATCCA AGTAATAGCA TGTACAGTTT GGTAAGCAAT      60
ATAATAGAGA GATATTACA GTGAAATAGG AAAGAGCAGT ATAGGTGCAA AGACAAAAG      120
CATGACACAG CTAGATACAG GGCAGCTGTT ATTGGTTTGT TATGGAGAAA ACCTGGAGAA      180
ATGGTGAGAG AAGGGGCAGA AGATGAGAGG GGCCAGATCA TGGAGTACCT GTTTGTGGCG      240
CTCAGGAGTT TAGATGTTAT CATGCAGATA ACTAGGAGCC ATTTGAGGAA CTTAAATACA      300
GGAGTGATAC CAGATTTATA TGTTTTTAAA ATGATTACTT GGTGGTAATT AAAGAAAAGA      360
TTGGATGATT TAGGCAGATC TCGAG                                          385

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(2) INFORMATION FOR SEQ ID NO:201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

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AATTCGGCCT TCATGGCCTA CGTTTTTTTA AATTTTTTTA ACTACATATT TGATACGATC      60
TTTTCTTCTT TGCCTTCTTT TTGATTACTT ACTTCTACC ATTCTATGTT TTTCTGCTACT      120
AGTTTGAAAA TTGTATACTT TGTTTTTATT CTTTCAGTGG TTACCCTAGA AATTACAACA      180
AACAAAAATT GCAACAACCT CGAG                                          204

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(2) INFORMATION FOR SEQ ID NO:202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

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GAATTCGGCC TTCATGGCCT AAAATCATCA TGCATATTTA TTTCTCCAAA GCACCTTTGA      60
CAAGCATGAT TTGGATAGAG ACTGTGCTTT GTCACCTGAT GAGCTTAAAG ATTTATTTAA      120
AGTTTTCCTT TACATACCTT GGGGGCCAGA TGTGAATAAC ACAGTTTGTA CCAATGAAAG      180
AGGCTGGATA ACCTACCAGG GATTCCTTTC CCAAGTGGAG CTCACGACTT ATTTAGATGT      240
ACAGCGGTGC CTGGAATATT TGGGCTATCT AGGCTATTCA ATATTGACTG AGCAAGAGTC      300

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TCAAGCTTCA GCTGTTACAG TGACAAGAGA TAAAAAGATA GACCTGCAGA AAAAACAAC	360
TCAAAGAAAT GTGTTACAGAT GTAATGTAAT TGGAGTGAAA AACTGTGGGA AAAGTGGAGT	420
TCTTCAGGCT CTTCTGGAG AAGACTCGAG	450

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCGGCC TTCATGGCCT AACTGGTTTC TGGCTCGTGG ANTCTGTTTC AAGATCATAT	60
AAGCCGTTGC CATTCCCAAG NAGCGCTGGG ATATGCTCCT TCTCAGATGC TGCTATTTC	120
GTGAAGGTAT TTAATGCTTG TTCAACATTA GATTCTGTT TGGTAGCCAT TAAGCAATAG	180
TTTTCCATTA TGCGAANCTG TACGTGACCC TGAACAGTCT GAGGTTTTAG TTCCTTAANA	240
AGTTTTTCTG CTGTTCTTAC TGCCAGTTTC ACAGATTCTT GCTTCTCAGT TGAATAACCC	300
AGGTCTCCAT CCAGGTTTTC AAATACTTCA CCTCCAACAG TTTCATTATC TGGATTCAAA	360
CAGATCTCTA TCATATTATA AAGGGCATT TGGCCCCAGT CACGATCTTT CCGAGCTTTA	420
TTAAAATGTC GAAGGGCATC ATTTGGTTCT CCAGTGATCC AAAGATACAG TCCTTTACAA	480
TACTGAAATC CTGGTTCCAA TTTTGCTCTG GAGNNACGTT TCTCAGCCAT TGAGAAAAAT	540
CTTGGGACAT CCCTCGAG	558

(2) INFORMATION FOR SEQ ID NO:204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC TTCATGGCCT ACAAGTAGGG ACTGACTTCT CTAGGTTCTCT ACAAAGCTCT	60
TCAACCACAC TCATTTCAG CTCTGTCAGA ACAGCATCTG AATTAGGAGG ACTTTGGGAT	120
TCTGGGATAC AGGAAGTATC CAGAGCTTTG GATATAAAAA ACCCTGGGAC AGATATTTTG	180
CAGCCTGAAG AGACCTATAT AGACCCTACT ATGATACAAT CTTTAACTTT TCCTTTGGCC	240
CTTCATAATC AAAGCTCCGA TAAGACAGCT AACATTGTGG AAAACCCATG TCCTGAGATT	300
CTAGGAGTGG ATGTAATATC TAAAGAGACA ACTAGGAGGA AGCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCGGCC TTCATGGCCT AAGAAAAAAA AGAAAGAAAA AAAATGATAC TTTCCAGGTT	60
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CGCTTGGGTC	CAGATCTGTA	TTCCCAGGGC	TCATAGAGAT	ATTGGCAAAC	TGACAGATTT	120
CATGGGCTCA	GAAACCTAAA	GACACCTACT	TGAATTCCTT	TGGTTGGCAG	TCAAATGTTA	180
ACTAGTGTGT	TTTCAAGCTT	CTATTCTTAG	GCATGTTACT	TCCTTTTGGA	AGTCAAAACC	240
AACCATCTTT	TAAGTAAGAG	GGCTAACCAA	ATATGTGCCA	CACTAACTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

GAATTCGGCC	TTCATGGCCT	AAAATATTAA	AATCTTTGAA	GAAGAAGAAG	TTGAATTTAT	60
CAGTGTGCCT	GTCCCAGAGT	TTGCAGATAG	TGATCCTGCC	AACATTGTTT	ATGACTTTAA	120
CAAGAACTT	ACAGCCTATT	TAGATCTTAA	CCTGGATAAG	TGCTATGTGA	TCCCTCTGAA	180
CACTTCCATT	GTTATGCCAC	CCATCTCGAG	GCAGGTCTAG			220

(2) INFORMATION FOR SEQ ID NO:207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

GAAAAAATGG	CCAAGGCTAC	TGGGAACTA	AAGCCAACTT	CTAAAGATCA	GGTATTGGCC	60
ATGCTAGAGA	AAGCCAAAGT	TAACATGCCA	GCCAAGCCTG	CTCCACCCAC	TAAAGCAACT	120
TCTAAACCAA	TGGGAGGGTC	CGCTCCAGCC	AAATTCCAGC	CTGCATCAGC	ACCTGCTGAA	180
GATTGTATTT	CCAGCAGTAC	AGAACCCAAA	CCTGATCCAA	AAAAGGCCAA	AGCTCCAGGA	240
TTATCCTCTA	AAGCAAAGAG	TGCACAAGGG	AAGAAGATGC	CAAGCAAAC	CAGCTTAAAG	300
GAGGATGAAG	ACAAATCCGG	GCCTATACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

GGAGACAAGT	TCTCCTCAGT	GAAGTGGCAG	TACCAGTGTG	GGCTTACCTG	TGAGCACAAG	60
GCCGACCTTC	TCCCTATCAG	TGCATCCGTC	CAGTTTATTA	AAATTCCTGC	ACAGTTACCC	120
CACCCCCTGA	CAAGATTCCA	GATCAATTAT	ACAGAGTATG	ACTGCAACAG	AAATGAGGTG	180
TGTTGGCCGC	AGCTTCTATA	TCCATGGACT	CAGTATTATC	AAGGGGAGCT	GCATTCTCAG	240
TGTGTTGCTA	AGGGCTTACT	GTTGCTGTG	TTCCTCACAT	TGGCCTTGTT	CCTCAGCAAC	300
CCCCGGACCA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 517 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

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GAATTCGGCC AAAGAGGCCT ATGTCCCTGT CCATCTTAGA GGCTGACCAA GCCCAGCCAT      60
GGGTGGTCCA AATTGCTTAG GTGGTCCCAA TTGCTTGGCT GGCCCAAGAG ATGTCTGGTT      120
CTTAACAATA CAAGAGCCTA TAGAAATTGC TAAAGGGATT TCAGCCACAA CTGAAGCTCA      180
CCAAGAATGA GTTTTCTGGA ACTGGTTAAA GTGTACAGT AGGGAGTAAG GAAATAAGAA      240
TCCCCACCAA ACATAAGAGA ACAGAATGAT AATAGTCCCT ACTAGTCCAT GACAAGGCTG      300
CCAATTAGGC ATTAAAGCT ATCAAAGATG ATGCTGTGAG GGACCTGGCA ACTTTTGTA      360
TAGTCTGACT TTAAATGTTT TATTAATGGC CAAGCAGCAA ATATTTTAGG ATTGTAGGC      420
TATATGGTCT CTGTCCCAAT TACTCCATTC TGCTACTGTA GCATAAAAGC AGCGATACAT      480
CCTAAACCCG TCGATTGAAT TCTAGACCTG CCTCGAG      517

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(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 829 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

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GAATTCGGCC AAAGAGGCCT AAGAACATGA AACATCTGTG GTTCTTCCTT CTCCTGGTGG      60
CAGCTCCCCG ATGGGTCTCG TCCCAGGTGC AGCTGCAGGA GTCGGGCCCCA GGACTGGTGA      120
AGCCTTCGGA GACCCTGTCC CTACCTGCA CTGTCTCTGG TGATTCCATC AGTCATTACT      180
ACTGGACCTG GATCCGGCAG CCCCCAGGGC AGGGACTGGA GTGGATTGGA TATTTCTATT      240
CACCCGGGAA CTCCAACCTAC AATCCCTCCC TCAAGAGTCG AGTCACCATG TCAGTCGACA      300
CGTCCACGAA CCAGTTCTCC CTAAAACTCA NTTCTGTGAC CACTGCGGAC ACGGCCGTCT      360
ATTACTGTGC GAGAGACCTA TATTGCCGTG GGGGAACCTG CTACCCCGCG AGACTTGACC      420
GCTGGGGCCA GGAACCCGGG GTCATCGTCT CGTCAGCCTC CACCAAGGGC CCATCGGTCT      480
TCCCCCTGGC ACCCTCCTCC AAGAGCACCT CTGGGGCACA GCGGCCCTGG GCTGCCTGCT      540
CAAGGACTAC TTCCCCGAAC CGGTGACGGT GTCGTGGAAT TCAGGCGCCC TGACCAGCGG      600
CGTGACACCC TTCCCGGCTG TCCTACAGTC CTCAGGACTC TACTCCCTCA GCAGCGTGGT      660
GACCGTGCCC TCCAGCAGCT TGGGCACCCA GACCTACATC TGCAACGTGA ATCACAAGCC      720
CAGCAACACC AAGGTGGACA AGAAAGTTGA GCCCAAATCT TGTGACAAA CTCACACATG      780
CCCACCGTGC CCAGCACCTG AACTCCTGGG GGGACCGTCA GTCTTCCTC      829

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(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

GAATTCGGCC AAAGAGGCCT AGTTAATCTG ATAAATTCAC CATCAATTTG GTAAGCTTTA 60
 ATATAACTAC CCTGTTTTT GAATACAGAT AATGCAAAAG AAAACCATTT TATACTCGGC 120
 TATATACCTT CCACCACTCG AG 142

(2) INFORMATION FOR SEQ ID NO:212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

GAAATTCGGC CAAAGAGGCC TAGTGAATC ATTCTGCCAC ACCATTTCTT ACTCAAATAG 60
 GTACAAACAT ACCACAGACA CTCCCATATA CACATGCTCC TCTATCCGCC AACTCTGGAA 120
 CCAAAACTAA ATTGCTCTTC AAGAGAGATG ATGGCTTTAA GAACAAAAT AGCCTTATCC 180
 TCTATTTTAC TTGCTGTACT GTTGTACTGT TTATTTAAGA AACAAGCTGG TGGTTGATGT 240
 CCAGGAAAAA TTATCTTTTC AAAATGAGGG AAGAGGAGGT TCACCATGTG GATATGGTGT 300
 GCCTTTCAAC ATCCTTAAGG ATTGTTGATA TCATTATTGT TAATCAATTG TTGTCAGCAC 360
 AGTGGCTGCC CAAGCTGTGC AAATGAAACA GCCAATCAGC AGGAGAAAGT GATGAAATTA 420
 AATGACCTCT TTCCTTAACC ACTCATCCGT AAGCCTTGTT ATTTTTCATA CAAACCTCGA 480
 GCCGGGGGAG GAGGGGCGGC GGCGAATGCT GGGAGAGTCA GGTCTAGAAT TCAATCGTAG 540
 GCCTCTTTGG CCGAA 555

(2) INFORMATION FOR SEQ ID NO:213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 97 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

GAATTCGGCC AAAGAGGCCT ACGAGAAGGG CGGTGTGTAC AAAGGGCAGG GACTTAATCA 60
 ACGCAAGCTT ATGACCCGCA CTTACTGGGA ATTCTC 97

(2) INFORMATION FOR SEQ ID NO:214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

GAATTCGGCC AAAGAGGCCT AAGAAGAAAT TGGTAGATTG CGAGAAGAGA TAGAAGAATT 60
 AAAACGTAAT CAGGAACTTT TACAAAGCCA GCTGACTGAA AAGGACTCTA TGATTGAAAA 120
 TATGAAATCT TCCCAAACAT CTGGCACAAA TGAACAGTCT TCAGCAATAG TTTCAGCTAG 180
 AGATTCTGAA CAAGTTGCAG AATTAAAACA GGAAGTGGCA ACTTTAAAGT CTCAGTTAAA 240

CTCACAATCT GTGGAGATCA CCAAACCTACA GACAGAAAAG CAGGAACTGT TACAGAAAAC	300
AGAAGCGTTT GCAAAATCAG TTGAGGTACA AGGAGAGACC GAGACTATAA TAGCCACCAA	360
AACTACTGAT GTAGAAGGAA GACTGTCAGC ATTATTACAA GAGACCAAAG AGTTAAAGAA	420
TGAAATTAAA GCTCTGTCTG AGGAAAGAAC TGCCATTAAA GAGCAGCTGG ATTCATCTAA	480
TAGTACC	487

(2) INFORMATION FOR SEQ ID NO:215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

GAATTCGGCC AAAGAGGCCT ACTGGGCCTT TCAGCACCTG CTCCAGCTTC ACCTTGGTGA	60
ACATCAGGTT GAAGTTCTCA GGGTGCTCGG TGATGGCCAT GTTGACAACA TCCAGGGCAT	120
GCTGTGGTGA CTTCTGGGCA GAGAAGAGCA GTGCCAGCAG GTGGAGGGCG TGGGCATCAT	180
CCTTGCCTAC CTTCAGGGCC TCCTGCAGCT GCTCCATGGC ACTGGAGATC TGTGCGACGA	240
GGGCCAGCTG CAGCGAGACA TAGAGGATGA CCTGGGGGTC ACTGGGCGCC AGCTGCTGAG	300
CCCTCTCCAG CGTCTGCAGT GCCTTCCGGT GCAATTCATC TTGCTTGAC TTCAGGGTGG	360
CGTCGGTGGC CTGCAGGCTA TAGGTGAGAC CCAGAGCCAG GTAGCCCTTG GGGAGGAACT	420
CCCCGCTTC CTCTCCGAGG CTGATCACCA TCATGGCAAA GTGCTCTGCT TCCTCTAGCC	480
AGCGAAGGGA CCCGATGCAG ACCTTCGCGG CCATCAGGGG CACGGTGGGG TCCGAGGGCC	540
GCAACTTCAC AACTCCCGC AGCAGGGACA CAGCGTAGGC TGAC	584

(2) INFORMATION FOR SEQ ID NO:216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

GAATTCGGCC AAAGAGGCCT AGACCTGCCC TAAAGATAGA GTCTTGATGC ACCGTCTACC	60
TTGTCCCCAA CCAAGAGTGA GTAGTGACA GAAGTCTCCT GGCACCCTGG GAATCCTGCA	120
TTTTTAATGG ACGAGCAGGG CAGGAAAGAA AAAAAAACC CAAACCCCAT CACTCTGCCA	180
GCCCCTGTGA CCAAAGCAGC CCAAATCAGT TACCTTGACA ACTCTCATGC ACAGACTGCA	240
CCAGCCTGTG TTGCAAACAT CACTGCCCCG CTTCTAACAG GAAGAGATAC TCTTTTGGGG	300
GTCTTGCAAG GCCCAGGACC AGAGCCCCTT CTACCCAGGG CCCTTCCAAA GGCAAAGCAC	360
AGAGTCACAT TTGGGCGTGG CATGAGAGGG AAATAAAGAG ATTTGGCTGT AGTGGGAGGG	420
AGGTTTCAGT GCTTTTCTG GGGACATGG TGCCTATCTC TATTCTGAGA GTTGTTCTCC	480
TCATAGGACA CCATAATCG CATCCAGGAC CTGCTGGCTG AGGGTACTCG AG	532

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

GAATTCGGCC AAAGAGGCCT AGTGTGTCCG GGTCTTATAC AAAACAACA CAGTGAATGA	60
AGGAATAAAT ATTTATTGAA TGGAAAATCA GCAAAGGAAA AAATTGTATA ATTGTCAATG	120
ACAATGGGAA GCACATAGTG AGGCTATGAG TGATTTGGAA ATCATGAGCG TGCAGTGTTC	180
TGTTACGCA TTTCGGTTGT GTTTTCAGAA AGTAACTACA ACATAGCATC ATGTAGCAGA	240
ATTGCTGGTT GTAAGCAAAA AGGCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

GAATTCGGCC AAAGAGGCCT AATTCTTTTT CTTTTTAATT TGAAGAAAAA TCATCAGTCT	60
TGGAATACAG AAGAGAAACT AGAAATATAC GTATTTTGTT TCACATTTGA ACAGTCATTC	120
TTGAGGAATA CTCCATACCT GAGTAGACAG CCATGTGGCC ATCGCAGCTA CTAATTTTCA	180
TGATGCTCTT AGCTCCAATA ATTCATGCTT TCAGCCGTGC CCCAATTCCA ATGGCTGTGG	240
TCCGCAGAGA GCTATCCTGT GAGAGCTATC CTATAGAGCT TCGCTGTCCA GGAACAGACG	300
TCATCATGAT AGAAAGTGCC AACTATGGCA GGACTGATGA CAAAATTTGT GACTCTGACC	360
CTGCTCAGAT GGAGAATATC CGATGTTATC TGCCAGATGC CTATAAGATT ATGTCTCAA	420
GATGCAATAA CAGAACCCAG TGTGCAGTGG TGGCAGGTCC TGATGTTTTT CCAGACCCGT	480
GTCCAGGAAC CTATAAATAC CTTGAAGTGC AGTATGAATG TGTCCCTTAC ATTTTCTTT	540
GTCTGGGACT ACTAAAAGGA GTATACCAGA GTGAACATTT GTTTGAGTCC GACCACCAAT	600
CTGGGGCGTG GTGCAAGAC CCTCTGCAGG CATCTGACAA GATTATTAT ATGCCCTGGA	660
CTCCCTACAG AACTG	675

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

GAATTCGGCC AAAGAGGCCT ACTCCCTGTT TTGAACAAGT TTTTGTGAGA ATTCTTAGTT	60
TTAGTTTTTG TTTAGCTTAC AACTGAAAA TTTTGAGAAG CATCTAAAAA AATCCACAAT	120
TAGTGCAAAA AGAGGGGACA ATACTTTAAG TCATTCCTTC TATAAAAAAGA ATTAAGGTTA	180
CTAAATGCCA ATTTTAAAGC AAATATATAG TTTCTATTG GCCTTCTGAA AGACAGCAGA	240
TATAAAAAATA GTTCAATATT AGGTTTAAAC AGGTTTGAAC AACACATGTA CTATCAGCTT	300
TATTTTACCT GCAAAAATAT TTTAGCTACA CTGGGAAAAA AATAAACTTG AGAATATAAC	360
TTACATTTTC TAAGGCCAGA TGCAAGAATA CTTATTTAGG CCTCTTTGGC CGAA	414

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

GACCGTCGAT TGAATTCTAG ACCTGCCTCG AGATTGGAGA CAGAAGGTCC CGGGAGCAGA	60
AAGCCAAACA GGAGCGGGAG AAAGAACTGG CAAAAGTCAC TATCAAGAAG GAAACTCGAG	120

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

GAATTCGGCC AAAGAGGCCT AAGCAGCAGC TGCTTATATG CATGTGAACA GCTGGGGAAT	60
TAATTTGGTA TGCATTCTCA GGAGCCACTC ATCTGCTGGC AGAGGTAGCA GAAGAATGCC	120
CTTAGTGTA GTCCTCTACA ACCATACACC AAATGTGCTC CCTGCATTTC AAATTCCATT	180
GTAGAAAGTC TCTGATAATC TCACTTATAC CATGAGCCAT TCCTCAGTAT CTGTCTCTT	240
CCTGTTAGTG TTCTACAATT CCTTTCTCCT TAATTTTCT CCGCTTTACA AAATGTCACA	300
CAGACAAGTG CATAATACTT AAACAAGCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

GAATTCGGCC AAAGAGGCCT AAGAAAAGCA CCCTTATTAA GAATTGCAGC AAGTAAGCCA	60
ACAAGGTCTT TTCAGGATGA TTTTCTTATA TCAAGTGGTA CATTTCATT TATTTACTTC	120
AGTTTCTGGT GAATGTGTGA CTCAGTTGTT GAAGGACACC TGCTTTGAAG GAGGGGACAT	180
TACTACGGTC TTCACACCAA GCGCCAAGTA CTGCCAGGTA GTCTGCACTT ACCACCCAAG	240
ATGTTTACTC TTCACTTTCA CGGCGGAATC ACCATCTGAG GATCCACCC GATGGTTTAC	300
TTGTGTCCTG AAAGACAGTG TTACAGAAAC ACTGCCAAGA GTGAATAGGA CAGCAGCGAT	360
TTCTGGGTAT TCTTTCAAGC AATGCTCACA CCAAATAAGC GCTTGCAACA AAGACATTTA	420
TGTGGACCTA GACATGAAGG GCATAAACTA TAACAGCTCA GTTGCCAAGA GTGCTCAAGA	480
ATGCCAAGAA AGATGCACGG ATGACGTCCA CTGCCACTTT TTCACGTACG CCACAAGGCA	540
GTTTCCCAGC CTGGAGCATC GAAATCTTTG TCTCCTTAAA ACATCTGAGA GTGGATTGCC	600
CAGTACACGC ATTAAAAAGA GCAAAGCTCT TTCTGGTTTC AGTCTACAAA GCTGCAGGCA	660
CAGCATCCCA GTGTTCTGCC ATTCTTCATT TTACCATGAC ACTGATTCT TGGGAGAAGA	720
ACTGGATATT GTTGCTGCAA AAAGTCACGA GGCCTGCCAG AAAGTGTGCA CCAATGCCGT	780
CCGCTGCCAG TTTTACCT ATACCCCAAC GCTCGAG	817

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

GAATTCGGCC	AAAGAGGCCT	AGGAGATACA	TCATCATATC	ACGGAAAGAG	ATGCAGATAG	60
ATCTTTGACC	ATACTTGATG	AACAGTTATA	CTCATTTGCG	TTTTCCACCG	TGCACATTAC	120
GAAGAAAAGA	AATGGAGGTG	GGAGTTTAAA	TAACATTCC	TCCTCCATTC	CATTGACTCC	180
CAGCACCAGC	CAGGAGGACC	TTTATTTCAG	TGTTCTCTCC	ACTGCCAACA	CACCCACGCC	240
CGTTTGCAAG	CAGTCCATGG	GCTGGTCCAA	CCTGTTTACA	TCTGAGAAAG	GGAGTGACCC	300
AGACAAAGGG	AGGAAAGCCC	TGGAGAGTCA	CGCTGACACC	ATCGGGAGCG	GCAGAGCCAT	360
CCCCATTAAA	CAGGGCATGC	TCTTAAAGCG	AAGTGGGAAA	TGGCTGAAGA	CGTGGAAAAA	420
GAAATATGTC	ACCCTGTGTT	CCAATGGCGT	GCTCACCTAT	TATTCAAGCT	TAGGTGATTA	480
TATGAAGAAT	ATTCATAAAA	AAGAGATTGA	CCTTCGGACA	TCTACCATCA	AAGTCCCAGG	540
AAAGTGGCCA	TCCCTAGCCA	CATCGGCCTG	CGCACCCATC	TCTCGAG		587

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 534 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

GAATTCGGCC	AAAGAGCCTA	AGTAGTTGCT	GCCTTCTTTC	AGATCAGGTT	ACCACAATGC	60
CTCCCCGCTG	CTGACGCTTC	ATCCCCCACA	CCTCCAGCCC	CAGTTACCTG	GAGCTTCTCA	120
GAACCCACTT	TGCCGGTGCT	AAAACACAAG	AGGGGGTGAA	AGTGGCTGCC	AGTAATGGCC	180
AGAAACCAAC	CACCAGAGGC	CAGGCTGAAA	GACAAGCTCC	GGGTGTCCAG	GGGCTGACGG	240
GCCAACCATG	TGGCAGGTCC	CAGGCCCCAC	CCACTGCGCC	ATCCGTCTCT	GAGCTCCACA	300
GTGGTCCAC	TAATGGGAAC	CTCCTCTAGG	GAGAGTGATA	CTGCACCTTC	ACCCGTAGGA	360
CTCATATTTA	TAACAATGTG	TAATGGCTGT	AGCAAAAAGC	CCTTGTTTCT	AGATGTAAAT	420
GGTCAAAGAA	ACAAGCGCTC	TATTGTTTTG	AATAAAATAG	TTCAAATGAG	TCCTGTATCA	480
TTGTATCTCC	TATTCTGGAT	TAGTGCCTTT	TGGACAGTAG	ACTGTAACCT	CGAG	534

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 118 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

GCTCCACTCT	CTCCCTATCC	ATTTGTAAGA	ACAGGCTCCC	CTCGCCGAAT	ACAGTTGTCT	60
CAAAATCATC	CTGTCTACAT	TTCCCCACAT	AAAAATGAAA	CAATGCTTTC	TCCTCGAG	118

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

```

GAATTCGGCC AAAGAGGCCT AAATTTTAGT AGAGATGGAA TTTCACCATA TTGGCCAGGC      60
CGGTCTCAAA CTCTGACCT CAAGTGATCT GCGCGCCTCG GCCTCCCAAA ATGTTGAGAT      120
TACAGGCGTG AGCCACCATG CCTCTCTTAC ATTCTTTTCT TCTGTTCACT ACAGCCGTGG      180
AGAGCTCCGG GTTGTCTGTC ACATGTGCAC TGCCCTCTCT TTTATGGACC TTTTAGGCTG      240
GCTGCACCCT CCGTCTGTGT CACCCTCCTG CTCCTCCTCC ACCTGGCTAG TTCCTGTTGG      300
CCACTTTTGG AAATTCATGC CAGTCCAGTC CACCCTGAGT ACATCCTCTT TCTGTGTCAC      360
TGAGCTCACT ATGCTGGGTT TTATCTATGT CTCCTCGCA ACTAGATCAT TCACGTCTTG      420
AAGTTAGGCA TCATGCGTTC TTCATTTCTG TACCTCCCAA CTCAATGCTT AGCACCAGC      480
AGGGGCTCAA GACTGTGTGT GGAATGAAGG ATTCGTGTGA AAATGCAGGG AGATGGAAGG      540
CTGAGCGTTT CTGTCCTTG ACCATTCCCG GGTGGCTCG AG                          582

```

(2) INFORMATION FOR SEQ ID NO:227:

- (i) SEQUENCE CHARACTERISTICS;
 - (A) LENGTH: 461 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

```

GAATTCGGCC AAAGAGGCCT AAAAATTAT AAATAAGTGA GACTACTGCC CCCTAGCCTA      60
AAATTCATTC CCTGCGCTCA CTCAACATCA TAGTTCCTTA GGAAGACAAG TTGTTCTATA      120
GCATAAAGAT ACAACCTATT TAGATAGTCT AAAGATTCTC CTCTGTTTCT CAAATACAGT      180
CAGTTATGCA GCTCAAAATG CCTCTCATTT TCCTGCTTTT TTTTCTCTA CTATTGTTGC      240
CTCCAGGCTT TGCAGAAAGA CATGTTATTC TCCCCCTAAA ATCTGTTTCT CTCTAGTTT      300
TCTCTCTGCC AGCAATGGCA CCACACAGTC TTTTGGTTTT GCACCAGAGA ATTAGAGATG      360
AACCCCTCAT CTCTAATCTA TCACAAGTTT CTCAGATTT AACTCTCAA ATCAAGATGT      420
TTCTCACCAT TTCCATTACT ATTGTCCCA GCTTTCTCGA G                          461

```

(2) INFORMATION FOR SEQ ID NO:228:

- (i) SEQUENCE CHARACTERISTICS;
 - (A) LENGTH: 133 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```

GCCTAAACCG TCGATTGAAT TCTAGACCTA TCTCGAGAAA GAGTTGTTCT GGAAAGAAAT      60
GAAGAAAAGA GCAGAACCA TCTCAAGCAG CCAAGTGGTG AAGTTGGATG TATGTGACCC      120
TACGTCTCTC GAG                          133

```

(2) INFORMATION FOR SEQ ID NO:229:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```
GAAAGGGATC AAAAAGAAAA AGTGATCGAA TGGAACTCTAC TGATACCAAA CGACAAAAGC      60
CTTCTGTCCA TTCAAGACAA CTGGTTTCTA AGCCACTGAG CTCATCTGTT AGCAATAACA      120
AAAGAATAGT TAGTACAAAA GGAAAGTCAG CCACAGAGTA TAAAAATGAG GAATATCAAA      180
GATCTGAAAAG AAACAAGCGT CTAGATGCTG ATCGGAAAAT TCGTCTATCA AGTAGTGCCT      240
CCAGAGAACC TTATAAGAAT CAACCTGAAA AAACCTGTGT CCGGAAAAGG GATCCTGAAA      300
GGAGGGCCAA ATCTCCTACG CCAGATGGTT CTGAGAGAAT TGGGCTTGAA GTGGATAGAC      360
GTGCAAGCAG ATCCAGCCAG TCTTCTAAGG AAGAAGTGAA CTCTGAAGAA TATGGCTCTG      420
ACCATGAGAC TGGCAGCAGT GGTTCCTCTG ATGAGCAAGG GAACAACACT GAAAATCTCG      480
AG
```

(2) INFORMATION FOR SEQ ID NO:230:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 501 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```
GAATTCGGCC TTCATGGCCT AGGGGATAAA TGTAAGCTTG TTAAAGTAAG CACCACACCA      60
TGTTTCTGTC TCCCCAGCAC CCAGCACAGT GCTGTGAACC TTGGCAGATG CTAGATAAAT      120
GTGTGTTGAA TGAATGTGCC TATGAAGCCA CAAAGATGCC ACATGTTAGT ATATCAGTGA      180
GAGGTGACTC CACAGTGCTC TCTGGAGAAG CAATATGAGT GACTGAAGAG TGGGGCCTTT      240
TGCTTTTGCC TGGATATAGG GGTGCTCTTC TACTGTAATT GGGTGTGGAA AACTCTGGC      300
TTTATGGTAT TCCATTAGGT TCTTTTCATT TAAAGTAGTC TTAAATCAA AGTATCCAAT      360
ATTTTAAAGC CACAAAGTAG ATTACATAAT TAGCAGAGAT TTTAGTCAGT AAAATGTTAG      420
AAATCAAAC ATAAAGAAAAT TCAAGTCCTT TATTTTGTGT CTTGGGTATA TGTCATTATT      480
TTAAATTCCA CAGCTCTCGA G
```

(2) INFORMATION FOR SEQ ID NO:231:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```
GAATTCGGCT TCGATTGAAT TCTAGGACTT GACAGAATTC GAGTTATCCT TCTCAGAACA      60
TGTGCAGAGT CTCTTTTTCG CTCACCATGT GGTCTGTGTC TCTTTCAGGT GGGAGTTTTC      120
GGGCCTCCAG GGCAGCAGGC ACCACCTCCA TATCCCGGCC CACATCCAGC TGGACCCCTT      180
GTCATACAGC AGCCAACAAC ACCCATGTTT GTAGCTCCCC CCCAAGACC CAGCGGCTTC      240
TTCACTCAGA GGCCTACCTG AAATACATTG AAGGACTCAG TGCGGAGTCC AACAGCATTG      300
```

GCAAGTGGGA TCAGAGCAAT CTCGAG

326

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATGGCCT AATCAGAAGC TTTTCAAAAT TCCGTCTTCA AGAAGAAACA      60
CCCCGTGGAGG AAGAAGACAT TATACAAAAC AAATTTAGAA ACTGGGATCA TGAGTGGAAA      120
AACAAAGGCA AGAAGGGCTG CCATGTTTTT TAGACGTTGC TCTGAAGACG CCAGCGGTAG      180
CGCCAGTGGC AATGCTTTGT TATCAGAGGA CGAAAATCCT GATGCGAATG GGGTAACTCG      240
ATCATGGAAG ATTATTCTAA GTACAATGCT TACACTGACT TTTCTTCTTG TAGGACTCCT      300
AAATCATCAG TGGCTTAAAG AAACAGATG' TCCTCAGAAA TCCAGACAAT TATATGCCAT      360
GCTCGAG                                         367

```

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

```

GAATTCGGCC TTCATGGCCT AAAGAAGAAT TGACACCTCT TGGAGTCCAC TTGGCACGAT      60
TACCCGTTGA GCCACATATT GGAAAAATGA TTCTTTTGG AGCACTGTTT TGCTGCTTAG      120
ACCCAGTACT CACTATTGCT GCTAGTCTCA GTTTCAAAGA TCCATTTGTC ATTCCACTGG      180
GAAAAGAAAA GATTGCAGAT GCAAGAAGAA AGGAATTGGC AAAGGATACT AGAAGTGATC      240
ACTTAACAGT TGTGAATGCG TTTGAGGGCT GGAAGAGGC TAGGCGACGT GGTTCAGAT      300
ACGAAAAGGA CACTCGAG                                         320

```

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

```

GAATTCGGCT TCATGGCCTA CGATGAGGCT GCTGTCAATT GTGGTGTGG CTCTATTGTC      60
TGCTCACTCA GCAGAGGAAG GAGCCAGGCT TTTGGCTTCC AAATCACTGC TGAACAGATA      120
CGCCGTGGAG GGACGAGACC TGACCTTGCA GTACAACATC TACAATGTTG GCTCAAGTGC      180
TGCAATTAGAC GTGGAACAT CTGATGATTC CTTCCCTCCA GAAGACTTTG GCATTGTGTC      240
TGGAATGCTC AATGTCAAAT GGGACCGGAT TGCCCCTGCT AGCAATGTCT CCCCACTGT      300
GGTCCTGCGC CCTCTCAAGG CTGGTTATTT CAACTTCACC TCGGCAACAA TCCTCGAG      358

```


(2) INFORMATION FOR SEQ ID NO:235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGGCT TCATGGCCTA GTTGTACGTA ATGTATTTAT ATGTTAATTT GTTATGTATA      60
TAGATGTGCA AGTCTTGTCA GAATTGGCCT CAGTGTAGTT AAAGGGCAGA AGGGGAAGAT      120
ACTGACTAGT CATAGAAATA CCTCATTTCG CTGTGGGAAG AGAAGGGAAG CCTCTTCAGG      180
GTGAGTGAAT GGCAAAGCGG TTGCTTCTGG CTCCTCCTTC CCCTGTGGTC TTGGAAGTGT      240
GTGGAAGGCA GGGACAGAGA TGGAGGCCGA GCCAATAGAC TGAAGAGACC ACAGCAATTG      300
GCTCCTCCAT CTAGAGATTT TCTTGGCAGT ATTCCATGGG ATGTTAAGCA AAGGAAACCA      360
AAGGAATCGT TTCAAATGGA CTCATGGCTT AGAAATCTTT ATTCTTAGGG CAGTCAGTAG      420
TATTCTAAAG CTTTCTGACA AGATAAAGGA AGTCACCAAA ATTTCTTTT TTAATTTGTA      480
TCTAATCCTC AACACAAAC CAAACTCTC GAG                                     513

```

(2) INFORMATION FOR SEQ ID NO:236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT ACTTGGAAT GTTTGATGCT ACTCTGAAAG ATCGAGAACT      60
GAGCTTTTCTAG TCGGCTCCAG GTACTACCAT GTTCTGTCAT TGGCTAGTGG GAATGGTATA      120
TGTCTTTCTAC TTTGCCTCCT TCATTCTACT ACTGAGAGAG GTACTTCGAC CTGGTGTCTT      180
GTGGTTTCTA AGGAATTTGA ATGATCCAGA TTTCAATCCA GTACAGGAAA TGATCCATTT      240
GCCAATATAT AGGCATCTCC GAAGATTTAT TTTGTCAGTG ATGTCTTTTG GCTCCATTGT      300
CCTCCTGATG CTTTGGCTTC CTATACGTAT AATTAAAGAGT GTGCTGCCTA ATTTTCTTCC      360
ATACAATGTC ATGCTCTACA GTGATGCTCC AGTGAGTGAA CTGTCCCTCG AG               412

```

(2) INFORMATION FOR SEQ ID NO:237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

```

TTCATGGCCT AGAGATATGC TTCTTTGTAC CAATATGGAA AATCTAAAAG AAAAAACCCA      60
CACTCAGCAC TATGAATGTT ATAGGTACCA AAAACTGCAG AAAATGGGCT TTACAGATGT      120
GGGTCCAAAC AACCAGCCAG TTAGTTTTC AAGAAATCTTT GAAGCCAAA GACAAGAGTT      180
CTATGATCAA TGTGAGAGG AAGAAGAAGA GTTGAAACAG AGATTTATGC AGCGAGTCAA      240
GGAGAAAGAA GCAACATTTA AAGAAGCTGA AAAAGAGCTG CAGGACAAGT TCGAGCATCT      300

```

TAAAATGATT CAACAGGAGG AGATAAGGAA GCTCGAG

337

(2) INFORMATION FOR SEQ ID NO:238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

GAATTCGCGC	ATTCGGTACA	ACAAGAGAGA	TAAACGATGA	AACCGTTACA	TTATACAGCT	60
TCAGCACTGG	CGCTCGGACT	GGCGTTAATG	GGGAATGCAC	AGGCAGTGAC	GACCATTCCG	120
TTCTGGCATT	CTATGGAAGG	GGAAGTGGGT	AAAGAGGTGG	ATTCTCTGGC	CCAACGTTTT	180
AACGCCGAAA	ACCCGGATTA	CAAAATTGTA	CCGACCTATA	AAGGCAACTA	CGAACAGAAT	240
TTAAGCGCGG	GGATTGCCGC	ATTTCTGTACC	GGCAACGCGC	CGGCTATTTT	GCAGGTTTAT	300
GAAGTTGGCA	CCGCCACCAT	GATGGCGTCG	AAAGCCATTA	AACCGGTGTA	TGACGTGTTT	360
AAAGAGGCAG	GGATTCAGTT	CGATGAGTCG	CAGTTTGTGC	CGACGGTTTC	AGGTTACTAC	420
TCCGACAGCA	AAACGGGGCCA	CTTACTCTCC	CAGCCATTCA	ACAGCTCGAC	CCCCGTTCTC	480
TATTACAACA	AAGACGCCTT	CAAGAAAGCA	GGATTAGACC	CGGAACAGCC	GCCGAAAACC	540
TGGCAGGATC	TGGCGGACTA	TGCCGCGAAA	CTGAAAGCCT	CCGGCATGAA	GTGCGGCTAC	600
GCCAGCGGCT	GGCAGGGCTG	GATCCAACCTG	GAAAACCTTA	GCGCCTGGAA	CGGTCTGCCG	660
TTTGCCAGCA	AAAACAACGG	CTTTGACGGC	ACGGACGCGG	TGCTGGAGTT	CAATAAGCCG	720
GAGCAGGTGA	AACACATCGC	CATGCTCGAG				750

(2) INFORMATION FOR SEQ ID NO:239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

GAATTCGGCC	TTCATGGCCT	ACTTACAGAA	CCTATTCACT	GGGAAGGAAG	CCCTCATTAT	60
AATGATTTTC	ATTCTTATGT	GTGTTTCAGG	ACGACTGGGT	TTGGATTGAG	AAGAGGATTA	120
TTATACACCA	CAAAAGGTGG	ATGTTCCCAA	GGCCTTGATT	ATTGTTGCAG	TTCAATGTGG	180
CTGTGATGGG	ACATTTCTGT	TGACCCAGTC	AGGCAAAGTG	CTGGCCTGTG	GACTCAATGA	240
ATTCAATAAG	CTGGGTCTGA	ATCAGTGCAT	GTCGGGAATT	ATCAACCATG	AAGCATACCA	300
TGAAGTTCCC	TACACAACGT	CCTTTACCTT	GGCCAAACAG	TTGTCCTTTT	ATAAGATCCG	360
TACCATTGCC	CCAGGCAAGA	CTCACACAGC	TGCTATTGAT	GAGCGAGGCC	GGCTGCTGAC	420
CTTTGGCTGC	AACAAGTGTG	GGCAGCTGGG	CGTTGGGAAC	TACAAGAAGC	GTCTGGGAAT	480
CAACCTCGAG						490

(2) INFORMATION FOR SEQ ID NO:240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

GAATTCGGCC	TTCATGGCCT	ACTTCTGGAC	TCTATAGAAC	CCACTGCCTC	CTGATGAAGT	60
CCCTACTGTT	CACCCTTGCA	GTTTTTATGC	TCCTGGCCCA	ATTGGTCTCA	GGTAATTGGT	120
ATGTGAAAAA	GTGTCTAAAC	GACGTTGGAA	TTTGCAAGAA	GAAGTGCAAA	CCTGAAGAGA	180
TGCATGTAAA	GAATGGTTGG	GCAATGTGCG	GCAACAAAG	GGACTGCTGT	GTTCCAGCTG	240
ACAGACSTGC	TAATTATCCT	GTTTTCTGTG	TCCAGACAAA	GACTACAAGA	ATTTCAACAG	300
TAACAGCAAC	AACAGCAACA	ACAACTTTGA	TGATGACTAC	TGCTTCGATG	TCTTCGATGG	360
CTCCTACCCG	TTTCTCCAC	TGGTTGAACA	TTCCAGCCTC	TGTCTCCTGC	TCTAGGATCC	420
TCGAG						425

(2) INFORMATION FOR SEQ ID NO:241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

GAATTCGGCC	TTCATGGCCT	AACCAGAACT	AATTTGCTAA	GTCTTTTGT	TAGTCCTGCA	60
AGACTGATGC	TTAATACACA	GTCTGTTCTC	CTGTGTCTAG	GTCAGGAAGT	CCAGTTTGCT	120
TTTCTGTTTT	GTGTCCTGGT	AGCAGCTGTT	GAGTAACTTT	CATTGGAGGT	TGGGAAGGAA	180
GTGAGGAGAA	AGTGTTCTTG	TTTAGTGTTT	TATTTCTAT	AATAGGATGC	TGCCTAACCC	240
AGTTCATCTC	TATGTCCTGT	TCAGTGAATA	TTCCGGGTAA	TTGAAAGAAA	ATATAATGGA	300
TGGGCTCCAT	TAAAACCAGC	TCAAAAATAA	ATTCTGTGCA	GTAAAGATTT	CTTGTCAGAA	360
TGTCTTGGAT	TGCACTTTTG	TTGAGGAAAG	ACAGTGTAAG	TAGTTAAAGA	ATGTTGATAA	420
AATTGAAACA	TTTGGTTGTG	GAATTGTGTG	TGTTACTCGA	G		461

(2) INFORMATION FOR SEQ ID NO:242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

GAATTCGGCC	TTCATGGCCT	ATGGACAAGG	AAGCATTGAG	AGCATGGTGT	CATCTGACTC	60
CACATCACCA	GATTCTTCTT	TAACAGAAGA	ATCAGTTTCT	GAGACAGCCA	GATGTTTATC	120
CCAGAAGATT	TGTAATGGGG	GATTATCTCC	TGGTAACCCA	GGAGATTCTA	AGGACATGAA	180
GGAAATTGAG	CCCAATTATG	AAAGTCCCTC	TAGTAATAAT	CAGGATAAAG	ATTTCATCACA	240
GGCTTCCAAA	AGCTCAATAA	AAGTTCCAGA	GACCCACAAA	GCAGTCCTTG	CTCTCCGATT	300
AGAAGAGAAA	GATGGCAAGA	TTGCTGTACA	AAGTGAAGAG	GAAGAAAGTA	AAGCCTCTAC	360
AGATGTTGCT	GGGCAAGCAG	TAACCATAAA	CCTTGTCCTC	ACAGAAGAGC	AAGCAAAACC	420
TTACCGAGTT	GTGAACCTGG	AACAGCCATT	GTGCAAGCCA	TATACTGTCT	TGGATGTGTC	480
AGCAGCCATG	GCCAGTGAGC	ACCTCGAG				508

(2) INFORMATION FOR SEQ ID NO:243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

GAATTCGGCT	TCATGGCCTA	GGTTTTCTGT	ACATGGAGAT	TAAACTGTCT	TCCAAAGTGA	60
AGAGTTTATT	GTTCTAGATC	TTGAGCACAA	AGGTTGGTAT	ACGTTAATAA	AAAAAATAGC	120
AAGGGAAGAA	AATCATTTCC	TTCATACCAA	GTAAGAGAGC	ACTTATCATG	GTAGGCACTG	180
GCTTTGCAAT	TATGAGACCA	GTAGTAGAAA	TAGCTTTAGT	TTCCTCAATT	TTCCTGGAGT	240
ATTCTTCAGA	CTTTCTTTAC	ACTGCTCAAG	GTGGGGCGAG	TGGCAGGGCG	GACCCTGGCG	300
ACCTGACGCT	GCGGAGGCTC	GAG				323

(2) INFORMATION FOR SEQ ID NO:244:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 396 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

GAATTCGGCC	TTCATGGCCT	AGCTTCAGTA	GCAAATAAGG	ACATCATCTG	CTATAACCTA	60
CAAGCAGTTG	GACAGATATT	CTACATTTCC	TCATTTCTCT	ACACCGTCAA	TTACATCTGG	120
TATTTGTACA	CAGAGCTGAG	GATGAAACAC	ACCCAGAGTG	GACAGAGCAC	ATCTCCACTG	180
GTGATAGATT	ATACTTGTCG	AGTTGGTCAA	ATGGCCTTTG	TTTCTCAAG	CCTGATACCT	240
CTGCTATTGA	TGACACCTGT	ATTCTGTCTG	GGAAATACTA	GTGAATGTTT	CCAAAACCTC	300
AGTCAGAGCC	ACAAGTGTAT	CTTGATGCAC	TCACCACCAT	CAGCCATGGC	TGAACCTCCA	360
CCTTCTGCCA	ACACATCTGT	CTGTAGCACA	CTCGAG			396

(2) INFORMATION FOR SEQ ID NO:245:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 370 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

GAATTCGGCC	TTCATGCTTA	GCCTCAGCTC	TTTCTTCTGG	GTTGTTTGTA	TTTTCTTTTC	60
TGTCCCAAAC	AGTTTCCCCC	ACAAAAAGAA	CTTTATGTCT	TTCTCTGTCT	TCCCTCAGTC	120
CTTCCAGTCA	GCAGCCTGTG	ATTGGGCTTT	TCCCTCAGA	AACGAACAAT	CCAGAACCCA	180
CTGTTTAAAA	CAACTGTATT	TTGCCTTGGG	AAGTCCCATT	GCCTTCCCTG	AAAACATTAA	240
ACATTCCTCC	GATCCCCAGC	CTGAGTCTCT	CTGTCTCTGG	GCCCCATCCT	GCTCCACAGC	300
AGGGCTGGTG	TGTCCAGCAC	AGAGTGACCC	TCCGATGCCC	TTTCCCACCC	GCCGCCCTGC	360
CTCCCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 367 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCGGCC	TTCATGCCTA	GAGAACTTGA	AGCTTTGCGG	CAGGAA-TTTA	AAAAGAAAGA	60
CAAGACGTTG	AAAGAGAATT	CCAGAAAGTT	GGAGGAAGAA	AATGAGAATC	TCCGAGCAGA	120
GCTACAGTGT	TGTTCTACAC	AACTGGAATC	CTCTCTCAAC	AAATACAACA	CCAGCCAGCA	180
AGTCATCCAA	GACTTGAATA	AAGAGATAGC	CCTTCAGAAG	GAGTCCTTAA	TGAGCCTGCA	240
GGCCCAGCTG	GACAAAGCTC	TGCAGAAGGA	GAAGCACTAT	CTCCAGACTA	CCATCACCAA	300
AGAAGCCTAT	GATGCATTAT	CCCGGAAGTC	AGCCGCCTGC	CAGGATGACC	TGACACAAGC	360
CCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCGGCC	TTCATGGCCT	ACGGCTTCAT	AGTAACTCTT	TGCCATATCT	CTAGCCAGCT	60
GCATAAAACG	TTGCCCATCA	GATGGAGACA	AAAGGTTTAA	AATACGCCTA	TAACCATCCA	120
TGGCCATTTT	ATGATCACCC	ATCTGTTTAT	AAAGGCTTGA	TCGCTCCAC	AGATAACGGA	180
CATTAGTAGG	TTCATATTTA	AGAGCTTTTG	TATAGCAAAA	AATAGCCTGC	TTAATATTGT	240
CTTGTTCCAG	AGACATTTCT	GCCAGTCTAA	CCCATCTTTC	TGTGTCACGT	GGATTTAAAT	300
GCGCAGCAAT	CAACTCAAAC	TGCAATGATT	TTTCCATGTC	ACCTTGGTCC	TCATATATCA	360
TGGCTAGAGT	AGAGAAATGGC	TCATAAGCCA	GAGGAGCTTG	TCTTATGATT	TCCATGCACA	420
TCAATATCGC	CTCTTCACGT	TCTCCTCGAG				450

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 408 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

GAATTCGGCC	TTCATGGCCT	AACGAACTG	ACGTCTACCT	CATGGGGCTG	CTGTGTGGGT	60
TTGGGAGGCA	AAAATCTATG	AAGGGTTTTT	TGAAATCCCA	TAGGTGCCAC	ATCTATGAGA	120
TGTTTGATAA	ATGTGAATAT	GCTTTTACAT	TTGGGCTTAT	CTAATTTGCA	ATAAGAGAGC	180
CTCTCTCTAT	CAACACCAGC	TTCTCTCTCG	GGCTGTTTGC	TCAGGGAAGG	CAAGAAAGCC	240
ACGTGCTGGC	CCTCTGCCTT	CTCTAAAGTG	CTGTTGGAGC	ATGGAGGAGC	TGGAGGAGAT	300
GGGGATGGAC	TGACAGCTAA	GAGGGCGGCT	GCTGGGACTA	GATAGTGGAT	GAAGAAAGAA	360
GGACGAGGAA	GCCGTGGGGC	AGCCTCTTCA	CATGGGGACG	AACTCGAG		408

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

```

GCCCATGACA GAGAGCAGTG CCAAAGACAT GGCCTACGAA CATCTGATAG ATGACTTATT      60
GGCTGCTCAG AAGGAAATTC TGTCTCAGCA GGAAGTCATC ATGAAGTTAA GGAAAGACCT      120
TACCGAAGCC CACAGCAGAA TGTCGGATTT GAGAGGGGAG CTAAACGAGA AGCAGAAGAT      180
GGAAGTGGAG CAGAACGTGG TGCTGGTCCA GCAGCAGAGC AAGGAGCTGA GTGTGCTCAA      240
GGAGAAGATG GCCCAGATGA GCAGCCTGGT AGAAAAGAAA GATCGGGAGC TGAAGGCCCT      300
TGAGGAGGCA CTCAGGGCTT CCCAAGAGAA ACACAGACTC CAGCTGAACA CAGAGAAGGA      360
ACAGAAGCCC CGGAAGAAGA CCCAGACGTG TGACACCTCT GTGCAGATAG AACCCGTCCA      420
CACTGAGGCC TTCTCCAGCA GCCAAGAGCA GCAATCCTTC AGCGATCTAG GGGTCAGGTG      480
CAAAGGGTCC CGGCACGAGG AGGTCATTCA GCGTCAGAAA AAGGCCTTAT CTGAAGTTCG      540
AGCGCGAATT AAAGAACTCG AG                                         562

```

(2) INFORMATION FOR SEQ ID NO:250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

```

GAATTCGGCC TTCATGGCCT ACCCAAACAG ACAGAAAACG CCACGAGGCA AGTGTAGTCT      60
CTCACAGCCT GGACCCTCTG TCAGCAGTCC ACATAGCAGG TCCACAAAAG GTGGCTCCGA      120
TTCCTCCCTT TCTGAGCCAG GGCCAGGTGCG GTCCGGCCGC GGCTTCCTGT TCAGAGTCCCT      180
CCGAGCAGCT CTTCCCTTTC AGCTTCTCCT GCTCCTCCTC ATCGGGCTTG CCTGCCTTGT      240
ACCAATGTCA GAGGAAGACT ACAGCTGTGC CCTCTCCAAC AACTTTGCCC GGTCAATCCA      300
CCCTATGCTC GAG                                         313

```

(2) INFORMATION FOR SEQ ID NO:251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

```

GTCTTGACAA AACCTAATT GCGCAGAAAA CAAGATGAGA TTGGCATGGC TTTATTTGTT      60
TTTTTTGTTT TGTTTTGGTT TTTTTTTTTT TTTTGGCTTG ACTCAGGAGA TCCCTCCCCG      120
GGGCTCCCGC CGGCTTCTCC GGGATCGGTC GCGTTACCGC ACTGGACGCC TCGCGGCGCC      180
CATTTCCGCC ACTCCGGATT CGGGGATCTG AACCCGACTC CCTTTCGATC GGCCGAGGGC      240
AACGGAGGCC ATCGCCCGTC CCTTCGGAAC GCGCTCGGCC CAACTCTCGA G                                         291

```

(2) INFORMATION FOR SEQ ID NO:252:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 384 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```

CGGGAAATGA AGCGGAAGCA GCGGAGTCC GAGAGGCCCA TCTTGCCAGC CAATCAGAAG      60
CTCATTACTT TATCAGTGCA AGATGCACCC ACAAAGAAAG AGTTTGTTAT TAACCCCAAC      120
GGGAAATCCG AGGTCTGCAT CTGTCACGAG TACATGCAGC GTGTCCTCAA GGTCCGCCCT      180
GTCTATAATT TCTTTGAATG TGAGAACCCA AGTGAGCCTT TTGGTGCCTC GGTGACCATT      240
GATGGTGTGA CTTACGGATC TGGAAC TGCA AGCAGCAAAA AACTGCGAA GAATAAAGCT      300
GCCCAGCTA CACTGGAAAT CCTCATCCCT GACTTTGTTA AACAGACCTC TGAAGAGAAG      360
CCCAAAGACA GTGAAGAACT CGAG                                         384

```

(2) INFORMATION FOR SEQ ID NO:253:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```

GGGACGTTGG TGTGAGGTT GGCATACGTA TCAAGGACAG TAACTACCAT GGCTCCCGAA      60
GTTTTGCCAA AACCTCGGAT GCGTGGCCTT CTGGCCAGGC GTCTGCCAAA TCATATGGCT      120
GTAGCATTCG TGCTATCCCT GGGGGTTGCA GCTTTGTATA AGTTTCGTGT GGCTGATCAA      180
AGAAAGAAGG CATACGCAGA TTTCTACAGA AACTATGATG TCATGAAAGA TTTTGAGGAG      240
ATGAGGAAGG CTGGTATCTT TCAGAGTGTA CTCGAG                                         276

```

(2) INFORMATION FOR SEQ ID NO:254:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 497 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

```

GAGTTTGTG GGCTTACCTT ATTTTAATTA AAAAGAAGTC GGGGCTACCA GGGGTTTCAG      60
ACGTGCTCGA TGGACACGTG ATTTGTAAAC AGCCAAGATT CTGGGGGACG GGGGGGTGCC      120
TCGGTGGGGT TGACATTTGA GTTACAGGGA CTTAATAATG GCCAGCCTTT CACATCCCAT      180
GGGAAACCGC CCCCCGGGC CTTGGAGAAT GGGGGTCCAA GTGCCTATCC CCCTTTGGAT      240
GTAAAATTCA TCGTTAGTAA ACATCATCCG CCCAGCAACA AGCAAAGCAC ATCGCAAGAT      300
TAAAACAAAG AATCCGCCGT GAACAGAAGG CCTCCATCTC TGCTCTCAGG CAGGTGTCCT      360
TCAGGGAGGA GCCTCAGGCA GCTGTTCTAA CCCTGCTGCC AACGCCTGGG CTGTTTCTGC      420
CGACAATCTT CTATTTCTCT AAAAGAGTAC GCTGAACAGC TGGCTCTGCG TTGATTGAAT      480
TCTAGACCTG CCTCGAG                                         497

```

(2) INFORMATION FOR SEQ ID NO:255:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 470 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

```
GAATTCGGCC TTCATGGCCT AGAGAACCGT TGCTTTTCCG AGTTGCTCTT CTTCCAGGCT      60
CCGTTGGTGG TCGGCATGGC CCGTGGAAT CAACGAGAAC TTGCCCGCCA GAAAAACATG      120
AAGAAAACCC AGGAAATTAG CAAGGGGAAAG AGGAAAGAGG ATAGCTTGAC TGCCTCTCAG      180
AGAAAGCAGA GGGACTCTGA GATCATGCAA GAAAAGCAGA AGGCAGCTAA TGAGAAGAAG      240
TCTATGCAGA CAAGAGAAAA GTGATGACTG GCTATTTGGA AAACCTGGGT GCTACTGCCA      300
ACTGGGTGTA TCATAAGCTC TAAGATCAAG ATTTTGTAGA GTGGACAGTC ATTACATATG      360
TTATAACTTA TCCTTTAAAA ACTATTTTAA ACTTTATCCT TTCAGCTTTA CTTAGTGCGA      420
TGTTTTAGAA GCAGTCTTCA AAGAATAAAA CACTAACCAT GCTGCTCGAG      470
```

(2) INFORMATION FOR SEQ ID NO:256:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 388 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```
GAATTCGGCC TTCATGGCCT AATTTTGTAT TTTTAGTGGA GACGGGGTTT CTCCATGTTG      60
GTCAAGCTGG TCTTGAAGTC CCAACCTCGG GTGATCCGCC CGCCTTGGCC TCCCAAAGTG      120
CTGGGATTAC AGGCGTGAGC CACCGCGCCT GGCCAGTAGT TTCTTAACAT TAAATTATCC      180
GCAAAATGGA AGAAATACTA GAGGTCTGTG AGGATGTTTC TTCTCTTTCA GTCGTGTTGTG      240
GTGGTTTGTG GTTTACAGGG GCTTGGGTAA CTGGATTTT AGGTTTATTA TTTTAAATAG      300
TAGACTCAAC ACTATTTTGT-ATTGCAGTAG AGATCACTTA TGCAGATCTT TTTAATACCA      360
TTTCATAGAG ATTAAGGGTC ACCTCGAG      388
```

(2) INFORMATION FOR SEQ ID NO:257:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```
GAAACAGGGC TCAAGAAGT GGTAAGTCT GTGGAGGAAA TGACAAGTAA AGGAAAACCA      60
GGACAAGAAG TCTTGGAAGA CGACCAGGAA AATACTTTAA AATATGAGTA TGAAGAAGAC      120
TTTGAAGTAG ATGAGGAGAA ACAAGGTGAA AAATCTAATG AAGAAGGACA GGCTGATGTT      180
CAAATGAATG GAATACCGCA GTCACCTTTG GATGATAAAA AAGATAATTT AGACCCTGAA      240
AAAGAGAGTG AAACCTCATC ACAGAAGGCA CCAGATGCCC GTGACAATGT GAAAGATGAG      300
AATGATGGAT GCTCTGAGAG TGAACGTCTC GAG      333
```

(2) INFORMATION FOR SEQ ID NO:258:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 544 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```

CACAGTGCTG GNTCACAACA AGATGNTCNA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC      60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC      120
GGACGGCGGT AATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA      180
GGAAGTCGGA CAGTGGAACA AATTCCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG      240
AAAAACCTTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAAATGTAG      300
TCGCCATAAA GTATGCATTG CTCAAGATTC TCAGACTGCA GTCTGCATTA GTCACCGGAG      360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT      420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTTGTGGTT CAGATGGTCA      480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT      540
CGAG

```

(2) INFORMATION FOR SEQ ID NO:259:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 393 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```

GAATTCGGCC TTCATGGCCT ACATCAGCAT CCCTGGGAGC ATCAGAAATG CAGAGCTCAG      60
GCCCGCCCCG GAGCTACCGA ATCAGAACCT ACATTTTACA CACCCCTCAG CTCAGAGCTT      120
GTTTCTCCCT GGATTCCATG GCCCTGTGCT GCTGGCAGCC CGGGGTTAGG GCATTTCTGT      180
GTCACCTGGC GACGGTGAAG CCTAGTTTCC TCCAGAGAGA TTATGCTGCT CTCCATCCAA      240
GTGAAGTGGC AATGGTGCCA GCCTGAGATT TCTGCCCTGA GTTTTAAGTA CGAGAGTGTG      300
GGCTGACAAAT AAATCCTTTT ATTCTACCCT CTCTGTTTCT CATAAGGAGA AATTTAAATT      360
CTGGAAGAGA TGAAGCTTGC ATTTACCCAA GAC

```

(2) INFORMATION FOR SEQ ID NO:260:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 705 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```

GAATTCGGCC AAAGAGGCCT AAGGGATTGT TATTCCTTTA AAAAAAACC AATACCAAAG      60
AAGCCTACAA TGTTGGCCTT AGCCAAAATT CTGTTGATTT CAACGTTGTT TTATTCACCT      120
CTATCGGGGA GCCATGGAAA AGAAAATCAA GACATAAACA CAACACAGAA CATTGCAGAA      180
GTTTTTAAAA CAATGGAAAA TAAACCTATT TCTTTGAAA GTGAAGCAAA CTTAAACTCA      240
GATAAAGAAA ATATAACCAC CTCAAATCTC AAGGCGAGTC ATTCCCCTCC TTTGAATCTA      300
CCCAACAACA GCCACGGAAT AACAGATTTC TCCAGTAACT CATCAGCAGA GCATTCTTTG      360

```

GGCAGTCTAA	AACCCACATC	TACCATTTC	ACAAGCCCTC	CCTTGATCCA	TAGCTTTGTT	420
TCTAAAGTGC	CTTGGAATGC	ACCTATAGCA	GATGAAGATC	TTTTGCCCAT	CTCAGCACAT	480
CCCAATGCTA	CACCTGCTCT	GTCTTCAGAA	AACTTCACTT	GGTCTTGGT	CAATGACACC	540
GTGAAAACCTC	GTGATAACAG	TCCATTACA	GTTAGCATCC	TCTCTTCAGA	ACCAACTTCT	600
CCATCTGTGA	CCCCCTTGAT	AGTGGAAACCA	AGTGGATGGC	TTACCACAAA	CAGTGATAGC	660
TTCCTGGGT	TTACCCCTTA	TCAAGAAAAA	ACAACCTCTAC	CTACC		705

(2) INFORMATION FOR SEQ ID NO:261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 729 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

GAATTCGGCC	AAAGAGGCCT	ACCTTACTTG	AGTCCACAGG	CAAGGCCCAA	TAATGCATAT	60
ACTGCCATGT	CAGATTCTTA	CTTACCCAGT	TACTACAGTC	CCTCCATTGG	CTTCTCCTAT	120
TCTTTGGGTG	AAGCTGCTTG	GTCTACGGGG	GGTGACACAG	CCATGCCCTA	CTTAACCTCT	180
TATGGACAGC	TGAGCAACGG	AGAGCCCCAC	TTCTACCAG	ATGCAATGTT	TGGGCAACCA	240
GGAGCCCTAG	GTAGCACTCC	ATTTCTTGGT	CAGCATGGTT	TTAATTTCTT	TCCCAGTGGG	300
ATTGACTTCT	CAGCATGGGG	AAATAACAGT	TCTCAGGGAC	AGTCTACTCA	GAGCTCTGGA	360
TATAGTAGCA	ATTATGCTTA	TGCACCTAGC	TCCTTAGGTG	GAGCCATGAT	TGATGGACAG	420
TCAGCTTTTG	CCAATGAGAC	CCTCAATAAG	GCTCCTGGCA	TGAATACTAT	AGACCAAGGG	480
ATGGCAGCAC	TGAAGTTGGG	TAGCACAGAA	GTTGCAAGCA	ATGTTCCAAA	AGTTGTAGGT	540
TCTGCTGTTG	GTAGCGGGTC	CATTACTAGT	AACATCGTGG	CTTCCAATAG	TTGCCTCCA	600
GCCACCATTG	CTCCTCCAAA	ACCAGCATCT	TGGGCTGATA	TTGCTAGCAA	GCCTGCAAAA	660
CAGCAACCTA	AACTGAAGAC	CAAGAATGGC	ATTGCAGGGT	CAAGTCTTCC	GCCACCCCCA	720
ACACTCGAG						729

(2) INFORMATION FOR SEQ ID NO:262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 686 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

GAATTCGGCC	AAAGAGGCCT	ACTACCATGT	CCTCTTGGAG	CAGACAGCGA	CCAAAAAGCC	60
CAGGGGGCAT	TCAACCCCAT	GTTTCTAGAA	CTCTGTTCCT	GCTGCTGCTG	TTGGCAGCCT	120
CAGCCTGGGG	GGTCACCCTG	AGCCCCAAAG	ACTGCCAGGT	GTTCCGCTCA	GACCATGGCA	180
GCTCCATCTC	CTGTCAACCA	CCTGCCGAAA	TCCCCGGCTA	CCTGCCAGCC	GACACCGTGC	240
ACCTGGCCGT	GGAATTCTTC	AACCTGACCC	ACCTGCCAGC	CAACCTCTC	CAGGGCGCCT	300
CTAAGCTCCA	AGAATTGCAC	CTCTCCAGCA	ATGGGCTGGA	AAGCCTCTCG	CCCGAATTCC	360
TGCGGCCAGT	GCCGCAGCTG	AGGGTGCTGG	ATCTAACCCG	AAACGCCCTG	ACCGGGCTGC	420
CCTCGGGCCT	CTTCCAGGCC	TCAGCCACCC	TGGACACCC	GGTATTGAAA	GAAAACACAGC	480
TGGAGGTCCT	GGAGGTCTCG	TGGCTACACG	GCCTGAAAGC	TCTGGGGCAT	CTGGACCTGT	540
CTGGGAACCG	CCTCCGGAAA	CTGCCCCCGG	GGCTGTCTGG	CAACTTCACC	CTCCTGCGCA	600
CCCTTGACCT	TGGGGAGAAC	CAGTTGGAGA	CCTTGCCACC	TGACCTCCTG	AGGGGTCCGC	660
TGCAATTAGA	ACGGCACATT	CTCGAG				686

(2) INFORMATION FOR SEQ ID NO:263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```

GAATTCGGCC AAAGAGGCCT AGGAGAGAGG AGGTGCTGCA AGACTCTCTG GTAGAAAAAT      60
GAAGAGGGTC CTGGTACTAC TGCTTGCTGT GGCATTTGGA CATGCTTTAG AGAGAGGCCG      120
GGATTATGAA AGAATAAAG TCTGCAAGGA ATTCTCCCAT CTGGGAAAGG AGGACTTCAC      180
ATCTCTGTCA CTAGTCCTGT ACAGTAGAAA ATTTCCCACT GGCACGTTTG AACAGGTCAG      240
CCAACCTGTG AAGGAAGTTG TCTCCTTGAC CGAAGCCTGC TGTGCGGAAG GGGCTGACCC      300
TGACTGTTAT GACACCAGGA CCTCAGCACT GTCTGCCAAG TCCTGTGAAA GTAATTCTCC      360
ATTCCCCGTT CACCCAGGCA CTGCTGAGTG CTGCACCAA GAGGGCCTGG AACGAAAGCT      420
CTGCATGGCT GCTCTGAAAC ACCAGCCACA GGAATTCCT ACCTACGTGG AACCCACAA      480
TGATGAAATC TGTGAGGCGT TCAGGAAAGA TCCAAGGAA TATGCTAATC AATTTATGTG      540
GGAATATTCC ACTAATTACG GACAGCTCGA G                                     571

```

(2) INFORMATION FOR SEQ ID NO:264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

```

GAATTCGGCC AAAGAGGCCT ACCAAGCAAG AACAGCTAAA ATGAAAGCCA TCATTCATCT      60
TACTCTTCTT GCTCTCCTTT CTGTAAACAC AGTCACCAAC CAAGGCAACT CAGCTGATGC      120
TGTAACAACC ACAGAACTG CGACTAGTGG TCCTACAGTA GCTGCAGCTG ATACCACTGA      180
AACTAATTTT CCTGAACTG CTAGCACCAC AGCAAATACA CCTTCTTTCC CAACAGCTAC      240
TTCACCTGCT CCCCCATAA TTAGTACACA TAGTTCCTCC ACAATTCCTA CACCTGCTCC      300
CCCCATACTC GAG                                     313

```

(2) INFORMATION FOR SEQ ID NO:265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

```

GAATTCGGCC TTCATGCCTA GCCTCTGAGT TCAGCTCAGA ACACAGATGA TCTCATTGAT      60
TCCTCACGTC AACCTTGGA AATCTGGGTA CCCTGGGACG TCCACACATG AGGACCGAGG      120
CTCAGGGACA TCAAGGGACT GGCCTGGTCC GAGTAACAGG GAGTAAATG GGAAGTAAAC      180
TCAGTCCAC GTCTGCCTGA CTCCAGAGTT TGGGCCACTG AACCATGCGG CTGCCATCTT      240
GGAGTTCTTT GAGCTGTGAA GTGCTGTGCA TCGTGTGATT CTGTGTCCCT TTTGTGCAGG      300
TACCAGGATT TCTATGCATT CGACCTGTCA GGAGCCACTC GAG                                     343

```

(2) INFORMATION FOR SEQ ID NO:266:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```

GAATTCGGCC TTCATGGCCT ACAGGAAGCA CAGAAAGACA AAATTGGAAA TGTCTAGTTC      60
CATGTTGATG CCTTCAGAAG ATGCAGGTGA ACAAAGAGAG GCCGGGAAAT CAGAGCTAGT      120
TGAAACCCAA CATGTTACCT TAGAGCCAGA GCTACCACTG AGTTCTCTAA GCACAGTCAA      180
ATCCCAGGAT TATGCTGAAA CAGAGCAGGA GGTCAATTTA CAAGCTATAG AGGCCATGGA      240
GGCCACAGAA GCCCTGGAGG CCACAGACGC CATGGAAGCC ATAGATCAAG GTAGCATGAA      300
AGATTATGGA GATGCGATCT CTAAGCTGGA AAGACTCGAG      340

```

(2) INFORMATION FOR SEQ ID NO:267:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GAATTCGGCC TTCATGGCCT AGGCACCCCT AGGCGACTCA GGGTTCGGGG AGGAGGAGAC      60
CAGACGGGGC CTTGGCTGGC ATGGCCTCTT CACAGGGCTG CCGTGAAGAA ACTTCGTGAC      120
AGCGGCGGAG AGGTGGCCCA GGAGTGAGAC AAGCAGGCCC CGGGCCTTGG ACTCAGACAT      180
GCTGGGTCCG GTCAGGCCCG TGTGGGAACC AGTGTTTTAG GGACTGGGTA CTCTCTTAGA      240
GAAGAAGTGA TGCTAAAGAG TCAGGAAGAC ACGAGCGGGC CAAATAAAG AGGAAGAGAG      300
GCCCTCAGGA CATCATGGCA CTTACTGCTT GGATTGTCT CCCCCTCCAG AATTCTGTGG      360
ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:268:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

GAATTCGGCC TTCATGGCCT ACTTGGGAAT TAACATCTTC GATAAATCCC AGAAGTCTTT      60
AAGTGACAGT AGAGAGCCTA CAGAGAAGCC TGGGAAAGCA GAAAAATCTA AGAGCCCAGA      120
AAAAGTGTCA TCGTTCTCAA ACTCCTCCTC CAACAAGGAA TCAAAAAGTAA ACAATGAGAA      180
GTTTCGTACT AAGAGCCCCA AGCCTGCCGA AAGCCCCCAG TCAGCCACTA AGCAGTTGGA      240
TCAGCCCACT GCTGCTTATG AGTATTATGA TGCTGGCAAT CACTGGTGCA AAGACTGCAA      300
CACCATCTGT GGGACTCGAG      320

```

(2) INFORMATION FOR SEQ ID NO:269:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 542 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```
GAATTCGGCC AAAGAGGCCT AGGGATATTT ACTGAGGGCC TACAGGGTGC CCAATACTGA      60
GCTAGCTAGG CTCAGGGACC TGTACACACA TGCATTCTCC ATTAGGGTTC TGCAATCCTG      120
ACACTATTAC TATCCTCAAG GACTCTGCGC ATCCAGACCC GTCTATTAGT TAGCAATGAG      180
AACCCCTGCC ATGGCCAAGT TACACAAGAA CACCCTTGCC CTACCTCTGC CCCCTGCNGA      240
TCTGAAAGTA ACCTGGTCTG AAAGAGAAGT AAAGATGTGG CTGTCCCTGG GTGCTAGGGA      300
GAGAGGCCTG TTGACAAAGC CACCAGCTGT CTCCAGTCAG AGCCAGGGAG ACAGGCTTCT      360
CCCTGCACCA TCCGCACTGC CATAGACACA GCAGCCAGCA ACAGCACTTG GACCATTACG      420
GAGTTCCAGG CCCAGTCTCC AACTGACCTC CCTCCTGCTC CAGCTGCCCA TGCTAACAAG      480
AGCCAGGGCA CAAGACCTCA CTTGGAACAA GTACCAGGCA GAAGAGAGCA TNACCNGCCG      540
GT                                          542
```

(2) INFORMATION FOR SEQ ID NO:270:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 613 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

```
GAATTCGGCC AAAGAGCCTA GTCGATTGAA TTCTAGACCT GCCTCCTTTT CCACTTGAAT      60
TGTTAAATTG TTTACTCCAG CATCTTTAAG TATTCCTGTA ACCTGCTGTA CTATTCTTTG      120
TTCTAGCACA TCAGATGTCA CCTGTATATG AATTGTTCTT GCCACAATAC TAGCAGAATG      180
ACGCCAAAAA TGTGGGTCTC GGTATGATAT TAATCCTTCA ATTTTCTGTA TCTTTTCTAA      240
AGCAATATGT AGTTCTTTTT CATATTCTGG TGGCAATCTC AGGAGTAGAA CCTGGCAGGC      300
ATCTTTAATC AGTGGAACAA CACTGAGAAA TATTAATATA GCAATAAAAA GAGAACAGAG      360
TGGGTCAGCG ATGAACCATC CAAACTGCTC TATAAGAACT GTGGATACGA TCACACCAAT      420
GCTGCCAAGA GTATCTGCCA AAACATGTAG AAATACACCC CTCATGTTAG CATTTCATGCC      480
TCCACCCGCA GATCCGTGGC TGTGACCATG CCCATGGTCA CTGTGTCCAT GCATATGATG      540
TGAATGGCTG TGATCAGATG AGTGACAGCT TCCTTGAGCC TAAACCGTCG ATTGAATTCT      600
AGACTGCCTC GAG                                          613
```

(2) INFORMATION FOR SEQ ID NO:271:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 763 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

```
GAATTCGGCC AAAGAGGCCT AGTCTGGTTC TTGCTTGATC TGAGAGCTTC CATCAGTCTC      60
TTTTATTCTT TCTGTGGCTG GAACTTCCAA CTGGCTTGGT TCAGCTGATT CTTGTATCAC      120
```

```

GGGGCCTTCT GACTCACTCT GATCAACCAG CTGGTTATTA ATCACAAGTC CTGGAAATGG 180
TCTAATGACC GTGAATTTGA TAACTCGGC AGAGTCTAAG ATCCTTCTCA TGGAGCTGAT 240
TTCCAGGTAG CTGGGGGCTT TGAAAGGACA CCCCCGGGG CATGCCATCA ACTACCACAC 300
AGCCAGGGTT AATTGTGATT TCCCTGTAGG GAACTTTCAC AGGAAAACCC ATACCAATAG 360
CTTCACCAAA TTTCCGACTA AAGAGGTCAT TCACTTGTTT TCTTAGCTGT CTAGCTTTT 420
CAACTTTCGA GAGTCTTTCA TTATCATCAT CTGGAATTGT CACCTGAATG ATGTTAAGGT 480
CTTCAACACC TGATGCAGTA GTATTAACAT TGGGTGATGA ATTTATTTT CTGGGAGGGC 540
TCTTAGAGGA GGTGCTCTCC TTAATCGCCG TCTCAAACAT TTCGGGCTTT TTAATGATGA 600
ACTTAATTTT GGCTTTGTTT CTGAGTATCT TCTCCAGCCT CGGAATGCCA AAAGTCGATG 660
GTCTTCGGAA TGGCACACCC TCAGGTAAGC CTTCCACATA AAAGTCTTCC GGGAAAGACT 720
CAAATAACGC GAACGGCACC TTCACAGCTT GTTTAAGGCC AAG 763

```

(2) INFORMATION FOR SEQ ID NO:272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

```

GAATTCGGCC AAAGAGGCCT AATTAAGGAA ATACTTTGCA TAAATTAATC AGCCCCACAG 60
TATTTCCTTA ATAAGAATAA AATGAATTTA AACTGATTC TG 102

```

(2) INFORMATION FOR SEQ ID NO:273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

```

GAATTCGGCC AAANAGGCCT ACNCCAGTCA AGGAAAGTCA AGTNGCAAGA AGGAANTGTC 60
TAAAAGAGAT GGCAAGGAGA AAAAAGACAG AGGAGTGACG AGGTTTCAGG AAAATGCCAG 120
TGAAGGGAAG GCCCCTGCAG AANACGTCTT TAAGAAGCCC CTGCCTCCTA CTGTGAAGAA 180
GGAAGAGAGT CCCCCTCCAC CTAAAGTGGT AAACCCACTG ATCGGCCTCT TGGGTGAATA 240
TGGAGGAGAC AGTGACTATG AGGAGGAAGA AGAGGAGGAA CAGACCCCTC CCCCACAGCC 300
CCGCACAGCA CAGCCCCAGA AGCGAGAGGA GCAAACCAAG AAGGAGAATG AAGAAGACAA 360
ACTCACTGAC TGGAATAAAC TGGCTTGTCT GCTTTGCAGA AGGCAGTTTC CCAATAAAGA 420
AGTTCTGATC AAACACCAGC AGCTGTCAGA CCTGCACAAG CAAAACCTGG AAATCCACCG 480
GAAGATAAAA CAGTCTGAGC AGGAGCTAGC CTATCTGGAA AGGAGAGAAC GAGAGGGAAA 540
GTTTAAAGGA ATAGGAAATC TCGAG 565

```

(2) INFORMATION FOR SEQ ID NO:274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GAATTCGGCC AAAGAGGCCT ACTTAAATCA AGGCCAAAAC TAAGGATTTA GGTAGAGTGT	60
ATTAGCCTTT CAATACCTGC TTATTAAACA GTTGTTCCTA TACTTTTCAA AGGTGTGTAG	120
AAGTTTGTGA AATAAATTTT CTGATAGGAT AACTAGATT CCCTATGATC TCTTATTTAT	180
TTATCATT	188

(2) INFORMATION FOR SEQ ID NO:275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GAATTCGGCC AAAGAGGCCT AGTCCGTGA GCGTACACAC CTGTCGAGCA CGAGCTCCTC	60
TAGGCGGTGC AGGTCCGAGG CCACGTACT CAGCGCCATG TCGGTGATNC GTGGGCACCA	120
CGAGAGGTCA AGGNTGCGCA GCTTGCGCAG GTTCTCGGCC ACGAGCTCCA CGCCGTGCTC	180
GGTGACCTTG GAGCAGCCCG AGAGGCTGAA CGCGGTGAGG TTGGGCAGGN TGTGCCACCAC	240
GTTGACCACG CCGTGGTTGG TGATCTCCCA GCAGGAGAGC AGGCGCAGCG TGTGCGTGCT	300
GTGGCCCTGG CGCGCCGTGA AGTAGGCCAG CGCCGTGTCC GTCACGTGGT AGGCCTGCAG	360
GCTCAGCTCC GCCAGGTTGG GCAGCAGCTG CGAGATGGCC GCGATGGCGT CGTCGGCCAC	420
GTTGATGCAG TCACTCACGC TCAGCGAGGT GATGCGCGCG CTCAGGCTGG ACCACAGCCC	480
GGCCTCGGTG AAGTCGTTGC AGCCCGACAG CTCCAGACGC ACCACGCCCT GCATCTGTTC	540
AAGCATAACC TCGAG	555

(2) INFORMATION FOR SEQ ID NO:276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GAATTCGGCC AAAGAGGCCT ACAGTGAATA ATCAGAAGTC AGTTTGGGAG AAGTCAAAAT	60
GGACACAATC TTCTTGTGGA GTCTTCTATT GCTGTTTTTT GGAAGTCAAG CCTCAAGATG	120
CTCAGCTCAA AAAAATACCG AATTTGCAGT GGATCTTTAT CAAGAGGTTT CCTTATCTCA	180
TAAGGACAAC ATTATATTTT CACCCCTTGG AATAACTTTG GTTCTTGAGA TGGTACAACT	240
GGGAGCCAAA GGAAAAGCAC AGCAGCAGAT AAGACAAACT TAAAAACAAC AGGAAACCTC	300
AGCTGGGGAA GAATTTTTTG TACTGAAGTC ATTTTCTCTT GCCATCTCAG AGAAAAACA	360
AGAATTTACA TTTAATCTTG CCAATGCCCT CTACCTTCAA GAAGGATTCA CTGTGAAAGA	420
ACAGTATCTC CATGGCAACA AGGAATTTT TCAGAGTGCT ATAAAACTGG TGGATTTTCA	480
AGATACAAGG CTCGAG	496

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

GAATTCGGCC	AAAGAGGCCT	ACACCCAGAG	ACTGTAATTT	GTGTAGTTTT	TCTTTTTTAA	60
CTTAAAGACA	ACTTTAAAAA	ATACTTACAT	TAATGTTTTT	TATATTCATA	GGTGGGTATA	120
TTCGCCTCAT	TCAAATGGCA	GTAGCCTTGG	CTCACATAAG	ACATGTTTCA	TGTGATCTGT	180
ATCCTGGCAT	ACCAGTTATA	TTTTGTGGGG	ACTTTAATAG	TACACCATCA	ACAGGAATGT	240
ATCATTTTGT	CATCAATGGC	AGCATTCCAG	AGGATCATGA	AGACTGGGCT	TCCAATGGGG	300
AGGAGGAAAG	ATGCAATATG	TCTCTTACAC	ATTTCTTCAA	GCTGAAAAGT	GCTTGTGGTG	360
AACCTGCTTA	CACAAATTAT	GTTGGTGGCT	TTCATGGATG	TCTAGATTAC	ATTTTCATTG	420
ACTTAAATGC	TTTAGAGGTT	GAACAGGTGA	TTCCATTACC	TAGTCATGAA	GAAGTTACCA	480
CTCCACTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

GAATTCGGCC	AAAGAGGCCT	ACAGAGAACA	GATAAAAATA	AGCCTGTGGA	ATGACCACTT	60
TGTGGAATAC	GGCAGAACCG	TGTGTATGTT	TCGCACAGAG	AAGATTGGA	AGCTCGTAGC	120
CATGGGCATC	CCTGAATCTT	TGCGAGGGAG	ACTCTGGCTT	CTCTTCTCAG	ATGCGGTGAC	180
GGATCTTGCC	TCACACCCTG	GTTACTACGG	GAATCTGGTG	GAGGAGTCCC	TGGGGAAATG	240
CTGCCTGGTA	ACCGAGGAGA	TAGAACGAGA	CCTGCACCGC	TCCCTGCCAG	AGCACCCCGC	300
CTTCCAGAAC	GAAACGGGAA	TTGCTGCTTT	GAGGAGAGTC	TTGACGGCCT	ATGCCACCCG	360
GAGCTCGAG						369

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

GAATTCGGCC	AAAGAGGCCT	ACTCTCCCTT	TCCACTCCCT	GGTGTCCCA	GGAGTGAGAT	60
GAGGGTGGAG	GGGCCCAGCA	CAGCACCTTC	AACCTCAGGA	TGAGAGAGGC	CCTTTCACAA	120
AACTCTAAGG	CAGGGGAACA	GGAAACAGAG	AAAGCCGAG	AACCCAGGA	GGGCCCCAAG	180
AGCGGATTCT	GGTGATTATT	AATGTGCTTG	CCCAATGAAG	AAAGAATACT	GGCACTCTCT	240
AGGTATGATG	AGAGCAGACA	GCAAACGTGG	GGCCTGTCTA	CAGTGATTCT	CTACCCCAAT	300
GTATGGTCAT	CCACGTTAGA	AGCAGCAGTG	AAAGGCGTGT	TGCTTTTCAT	TATTAACCTC	360
AAATCCCAGT	CCCTAAACCA	GCTCTTGACG	CCCCTCTGTC	AGGTGCTAAT	CCTGGAAACT	420
GGAGGCCACC	TGGTCTCCAC	TTAGGTGAG	GAAAACCTGG	GAGAAGCCAT	CAGACTGCAC	480
CTGTGGCATG	AGATGCTTTG	AGACAGGTCA	AGAGGAGGAG	CTCTCGAG		528

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

```
GAATTCGGCC AAAGAGGCCT ACAGTGTCGG AGTAGATTG AACTGGAGG TGAAGGTAGG      60
AGTAAGTGAT AGATTTTAGA ATTAGTGCTC AGAGCTGAAA TATCCAGTCC GTGAACCTAG      120
AGGCCAGCCT TCATACCACT GTGATGACAG GAACTACCCT AATCTTTTCT GTCCTTTTCT      180
CTCTGCTGTC CCTCGGGCTG CCAGGCCAGC AGCAACACCC ACAGGTAATC TCCCCGCTGA      240
CTCCATCCAC TTGCTCTGCC CTCTGCCCTC TCTGTGCCCC GTTGACCTG AGCGTACACC      300
CCAGCAGTGG CATCCAACCT GAG                                         323
```

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

```
GAATTCGGCC AAAGAGGCCT ACTCAGTCAG TACCATGCCA GTTACCTTTT TTCCTTGTA      60
CTTAATGAAT TGGATTTTCC TCAATCTGTT ATTTGTAGGA GGTGTGTATG GGGCCAGGGT      120
AGATTTCCAG ATTTCTGCCT CAGAGGTAGT CTTTTCACA TATGACACCT GGGTGTGTGT      180
CTCTGTGTGG CCACAAGTCT TCTGCCTCTC TAAAAAATG TCTAGACCTT CTAGAAGGTC      240
TTTTGCCGCT AATTCTGAAC TTTCCACTCC TTCCTTTGCA GCTGTGATTG GAGGGACATG      300
GCTCCAGCAT GCCAATGTAA ACCACCGCCC CCTCGAG                                         337
```

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

```
GAATTCGGCC AAAGAGGCCT AGGCTCTTCC ACTTAATTTC ATACTTTCAG GTCTGGATGC      60
CCATTTTAAT TCTTCTGAAA GCATGCCTCC TTCTGGCTTC AGGACTCCAT CTCCAGCCTT      120
ATGATCTAAA AATAATGGAA AATTACCCGG TATCGTTAGA GCTACACCAA AATTGCATTG      180
AGCCAAAACCT CGAG                                         194
```

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

GAATTCGGCC	AAAGAGGCCT	AAAATCATCA	TATTCATAGA	GATATTAAAA	GTGCAAATAT	60
CTTACTGGAT	GAAGCTTTTA	CTGCTAAAAT	ATCTGACTTT	GGCCTTGCAC	GGGCTTCTGA	120
GAAGTTTTGC	CCAGACAGTC	ATGACTAGCA	GAATTGTGGG	AACAACAGCT	TATATGGCAC	180
CAGAAGC:TT	GCGTGGAGAA	ATAACACCCA	AATCTGATAT	TTACAGCTTT	GGTGTGGTTT	240
TACTAGAAAT	AATAACTGGA	CTTCCAGCTG	TGGATGAACA	CCGTGAACCA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

GAATTCGGCC	AAAGAGGCCT	AGCAACATCC	ACGCAGCTGC	TCATCAGGTA	CGAGTGCTTC	60
CATATCCATT	TACCCACCAT	TGGCAATTG	AAAGGACCAT	CCAGACCCCC	ATAGGATCCA	120
CATGGAACAC	CCAGAGGGCT	TTCCAAAAGC	TGACTACTCC	CAAGGTCGTC	ACCAAGCCAG	180
GCCATATCAT	TAACCCCAT	AAAGCAGAAG	ACGTGGGCTA	CCGGTCTTCC	TCAAGGTCGG	240
ACCTGTCTGT	CATACAGAGG	AATCCAAAAC	GAATCACCAC	ACGTCACAAA	AAACAGCTGA	300
AGAAATGCTC	TGTAGATTGA	GTTGCTGGAG	GAGTGACAGC	CAGGAGCCCT	GACTTCACTT	360
CCTTTGGTCC	AGTTTTACTC	TGATACAGGG	TGGATTCCAA	AACTGGCTCA	GTACATTGCA	420
TGTAGTTAAG	CCACATTTTA	AAAATAAAGG	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

GAATTCGGCC	AAAGAGGCCT	AAGGTCGGCC	TGTTTCATCTT	GATTAGCATC	CAGGCCTTGG	60
AATATTTTCAT	CAATGACAGC	TTTATCTTTG	ATATTCTTGA	TGGTGTTTGC	AAGCTCCTTT	120
GTAAGCAGCT	GCTTCAGCTC	ACCCCTCGAG				150

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

AATCCAAGCA ATAACCCAAG CAAAACTTCA GATGCACCTT ATGATTCTGC AGATGACTGG 60
TCTGAGCATA TTAGCTCTTC TGGGAAAAAG TACTACTACA ATTGTGGAAC TCGAG 115

(2) INFORMATION FOR SEQ ID NO:287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

GGAAGAAGAT GCTAGGAGAA GACTCAGATG AAGAAGAGGA AATGGATACC TCTGAAAGGA 60
AGATAAATGC TGGTAGCCAA GATGATGAGA TGGGTTGCAC CTGGGGAATG GGAGAAGATG 120
CAGTAGAGGA TGATGCTGAA GAGAACCCTA TTGTCTTAGA GTTTCAGCAG GAAAGGGAGG 180
CCTTTTATAT AAAGGATCCC AAAAAGGCTC TCCAAGGCTT TTTTGACCGA GAAGGAGAAG 240
AATTAGAATA TGAATTTGAT GAACAGGGAC AACTCGAG 278

(2) INFORMATION FOR SEQ ID NO:288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

GGATTCTGA GGCCAAGTGC CCAATAGTTT CCAGTAGAAA CATGGCCATA CCAGTCTAGA 60
ATTTAACCTT CTCATTTAAT CAATAGCACA ATCTAACCTA CACAAGAATA AGCAATCAAA 120
CATCCAGTAT AACATGTTTT TCATTTTAC TTCTTGCGG TCAATTTTTT TAATGATCTA 180
TTTAAAATTT TTTCAAAATG ACAACTACTA TGAATACTG AATACAAAGT TCAGTAACAC 240
AACATTGATA ACAACAACAG CAGCAACAAT ACCACAACCA CCACCACTGA ATGGTCTGGG 300
CACCTTCACA ATGGCTGTTG TACTTAGTTA CGAAGAAGAG TGGGGACAGA AAATGAAGCT 360
CGAG 364

(2) INFORMATION FOR SEQ ID NO:289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

GACTCCATGC GTATGTCCCA CCTAAAGGTC GGCTCTGCTG CCGACATCCC CATCAACATC 60
TCAGAGACGG ATCTCAGCCT GCTGACGGCC ACTGTGGTCC CGCCCTCGGG CCGGGAGGAG 120
CCCTGTTTGC TGAAGCGGCT GCGTAATGGC CACGTGGGGA TTTCAATCGT GCCCAAGGAG 180
ACGGGGGAGC ACCTGGTGCA TGTGAAGAAA AATGGCCAGC ACGTGGCCAG CAGCCCCATC 240
CCGGTGGTGA TCAGCCAGTC GGAAATTGGG GATGCCAGTC GTGTTCGGGT CTCTGGTCAG 300
GGCCTTCACG AAGGCCACAC CTTTGAGCCT GCAGAGTTTA TCATTGATAC CCGCGATGCA 360

GGCTATGGTG GGCTCAGCCT GTCCATTGAG GGCCCCAGCA AGGTGGACAT CAACACAGAG 420
 GACCTGGAGG ACGGGACGTG CAGGGTCACC TACTGCCCCA CAGAGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

GAATTCGGCC TTCATGGCCT AGATTGAGTC ACATTGTTCT CTTTGATCCA TTTTCTTTTA 60
 GACAACATCA CTCAAACAAC CCTATTACTT CAGTAGCAAT GAAGTGTCTC TGGATTTTAT 120
 TAAGCATCTC ACTTGTTCCT TTTCTTCAGC TGTATGGCAC CCTGTCTTCC TGTACACCAG 180
 AGGCTCCTCA GCTGGGTAAG GTGAGCCAAC GTTACCAGGA GTATATGCTG AGAGGCCATT 240
 TCAAAGTCTT TCATAGAAGG CTGTGCTTGG GCAAACCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

GAAACTCTGC CCCTGAAGGT TTGTTTTCTA ATTCAGAGGT TTAAATTAAT CTAGCCCACT 60
 TAATAAAACC AGAGATCCTA TGGGAAATTT AGCCTAAGAC AGTGCTGGAA ATTGCCATAT 120
 GTTGATACAA AGAAGTGTTC GGCCACATTA CAGGTCTCAG ACTCAACTGC TATGTGTGAC 180
 TGCCGCTCTG TGCCTATGTC TTGCTTTTTT GCTGAGTTCC CTATTTCCAT ATCTCCAGGT 240
 GATCCTCGAG 250

(2) INFORMATION FOR SEQ ID NO:292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GAAATGTCAG AGGCACATAA GCTTTTACAA AAATTGTTGG TTCATTGTCA GAAACTGAAG 60
 AACACAGAAA TGGTGATCAG TGTCCTACTG TCCGTGGCAG AGCTGTACTG GCGATCTTCC 120
 TCCCTACCA TCGCGCTGCC CATGCTCCTG CAGGCTCTGG CCCTCTCCAA GGAGTACCGG 180
 TTACAGTACT TGGCCTCTGA AACAGTGCTG AACTTGGCTT TTGCGCAGCT CATCTTGGA 240
 ATCCCAGAAC AGGCCCAACT CGAG 264

(2) INFORMATION FOR SEQ ID NO:293:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 416 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

```
GAATTCGGCC CTTTCATGGCC TAGGTTTCTC CGTGTGGTGC AGGCTGGTCT CGAACTCCTG      60
ACCTCAGGTG ATCCACCTGC CTCAGCCTCC CAAAGTGCTG GGATTACAGG CATGAGCCAC      120
CATGTCCTGC TATAATAAC TTTTAATAGG CTCTTTTCTT GGCTTTTTTT TTTAGTAACT      180
CAGCCCATT TCTTCTTCTC AATCTGGTCT TTGTTAATGT TGATAACGCT GTCTTACTTT      240
TAAATTGCCG TGATTAGAAA TTAGTAGAGA TATATAAACC TAGTCTTTTG GGGGATTTTG      300
AAAGGGTCAT AGTATTCTTA CTGTCTTTCA AAATGTACCT TATATTGAA CATTGGAAGA      360
TACGTGTTGC TGAATACAAG TTAGTTTCAT ACACACACAT ACACATGACA CTCGAG      416
```

(2) INFORMATION FOR SEQ ID NO:294:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 458 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

```
GAATTCGGCC TTCATGGCCT ACTCCATTCC CAGATAGAAA GCTTGAATGA AGAGTTGGTC      60
CAGCTGCTTC TCATCCGAGA TGAGCTGCAC ACAGAGCAGG ATGCCATGCT GGTGGACATT      120
GAAGACTTGA CCAGACATGC TGAAAGTCAG CAGAAGCACA TGGCAGAGAA AATGCCTGCA      180
AAGTGAAAAG AAGCCATTCA ACCAGAGAAC AAGCTAGAAT TTATTTTGCT TCTGTGGTTG      240
TAAAAATGCT GTTGCTAAAG GTGGCGCAGA AACAAATATC AGTGTTAGTC ATTGATAATG      300
TCTGAAGCTT AATGTCCAGT GATTGGCCTT TGCTTCTTAA TTTATTTTAA TTTTCTACTT      360
GTGCCACTTA ATATCAGGCA TTTTAATAAA ATATTGTTAC AAAAAATGTA CAGTACTGAC      420
ACCACCACAA ATCATGGTTA ATAAAAGAGA GTCTCGAG      458
```

(2) INFORMATION FOR SEQ ID NO:295:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

```
GTGTAAAACC AATGCCAGGA AAACCAAATA CAAAAACCC TCCACGGAGA GGTCTCTCTGA      60
GCCAGAATGG GTCTTTTGGC CCATCCCCTG TGAGTGGTGG AGAATGCTCC CCTCCATTGA      120
CAGTGGAGCC ACCCGTGAGA CCTCTCTCTG CTACTCTCAA TCGAAGAGAT ATGCCTAGAA      180
GTGAATTTGG ATCAGTGGAC GGGCCTCTAC CTCATCCTCG ATGGTCAGCT GAGGCATCTG      240
GGAAACCCTC TCCTTCTGAT CCAGGATCTG GTACAGCTAC CATGATGAAC AGCAGTCTCG      300
AG      302
```

(2) INFORMATION FOR SEQ ID NO:296:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 412 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

CATGGATCTG	CCTCCTGAGA	GGGATGGAGA	GAAGGGGAGG	AGCACAAAGC	CTGGCTTTGC	60
CATGCCAAAA	CTTGCACTTC	CCAAAATGAA	GGCTTCTAAG	AGTGGGGTCA	GCCTGCCACA	120
GAGAGACGTG	GATCCTTCCC	TTTCTAGTGC	CACAGCAGGG	GGTAGCTTTC	AAGACACAGA	180
AAAGGCCAGC	AGTGACGGTG	GTAGGGGAGG	ACTTGGTGCA	ACAGCAAAGT	CCACAGGAAG	240
TGAGGGTGTG	AACCTCCACC	GGCCACAGGT	CCACATTCCC	AGTTTGGGCT	TTGCCAAACC	300
TGATCTCAGA	TCCTCCAAGG	CCAAGGTGGA	GGTGAGCCAG	CCTGAAGCTG	ACCTGCCTCT	360
TCCCAAACAT	GATCTGTCTA	CCGAAGGTGA	CAGCAGAGGA	TGTGGGCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:297:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 308 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

GTGCTGCTGG	CGCGGGGAGT	GCGCGTCAAG	GTGAACGAGG	CCTACCGGTT	CCGCGTGGCA	60
CTGCCCTGCGT	ACCCAGCGTC	GCTCACCGAC	GTCTCCCTGG	CGCTGAGCGA	GCTGCGCCCC	120
AACGACTCAG	GTATCTATCG	CTGTGAGGTC	CAGCACGGCA	TCGATGACAG	CAGCGACGCT	180
GTGGAGGTCA	AGGTCAAAGG	GGTCGTCTTT	CTCTACCGAG	AGGGCTCTGC	CCGCTATGCT	240
TTCTCCTTTT	CTGGGGCCCA	GGAGGCCTGT	GCCCGCATTG	GAGCCACAT	CGCCACCCCA	300
ATCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:298:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 269 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

GAATAAGTAA	ATTCATGGAA	AGGAAGAAAT	TAAAAGAAAG	TGAGGAAAAG	GAAGTGCTTC	60
TGAAAACAAA	CCTTTCTGGA	CGGCAGAGCC	CAAGTTTCAA	GCTTTCCCTG	TCCAGTGGAA	120
CGAAGACTAA	CCTCACCAGC	CAGTCATCTA	CAACAAATCT	GCCTGGTTCT	CCGGGATCAC	180
CTGGATCCCC	AGGATCTCCA	GGCTCTCCTG	GATCCGTACC	TAAAAATACA	TCTCAGACGG	240
CAGCTATTAC	TACAAAGGGA	GGTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:299:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 458 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAGCGACCTT	TGGAATAGTT	AAGCACAGGT	CATTGTGGAC	ATGAATTCAG	GCCTCTGTAC	60
TAAAATCTAT	TTCAGGGAAT	GTTCTGTCTA	GTGATTTGCT	CACCATTTGA	TATATAATGA	120
ATTATAGGAC	AAGTATAAGC	TGATCTGCTA	TAGCTGTCCA	TCAGAGAGAA	TACACGTGGC	180
TATAACATCT	ATAACAAAAC	GACGATTCCCT	CTACAAGAGG	CTGTTTCTCA	CTGCTAACGT	240
TGGTGTTTCT	GGCGTGGGAA	GAAATGCACA	GGCGTGCATG	GCATGCACGT	TCAGACAGCT	300
GCATTGTAAG	AGTTCTGTCA	TGCAGTCTGA	AAAGGGAAGA	AACAGGATGG	CTTTCTGTAG	360
CCACACCTGT	GAGGCGTGAT	GATTGTTGTA	TTATTAGATT	ACTGATTTTT	CTTTTCTGAA	420
AATACATTTG	AGTTTTAATC	ACATCTGTGG	AACTCGAG			458

(2) INFORMATION FOR SEQ ID NO:300:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 99 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GGGATGCCTG	TTCTTGGGGT	AGAGAAGTCA	GGTAGCCCAG	GGCCCGCACT	CTCAATAGAC	60
CTTCAGAGAA	AAGGCATCGA	GGTAAATGCC	GCACTCGAG			99

(2) INFORMATION FOR SEQ ID NO:301:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 569 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GGTCTAACAG	TAACACTACT	CAAGAGACCC	TGGAAATAAT	GAAAGAATCA	GAAAAAAAC	60
TGGTGGAAGA	ATCTGTAAAC	AAAACAAGT	TTATATCTAA	GACTCCAAGT	AAGGAAGAAA	120
TTGAGAAAGA	ATGTGAAGAT	ACCAAGTTGC	GTCAGGAGAC	ACAGAGGCGG	ACATCTAACC	180
ATGGTCATGC	CAGGAAAAGA	GCCAAGTCTA	ATTCCAAGCT	AAAGTTGGTG	CGTAGCCTGG	240
CAGTGTGTGA	GGAGTCCTCC	ACCCATTG	CTGATGGGCC	ATTAGAAACC	CAGGATATAA	300
TTCAATTGCA	CATCAGTTGC	CCTTCTGACA	AGGAGGAAGA	AAAGTCCACA	AAAGATGTCT	360
CTGAAAAGGA	AGACAAGGAC	AAAACAAAG	AAAAGATCCC	AAGGAAGATG	CTGTCCAGAG	420
ACTCCAGCCA	GGAATATACG	GACTCCACTG	GAATAGACCT	ACATGAATTT	CTTGTAATAA	480
CACTGAAAAA	GAACCAAGG	GACAGAATGA	TGCTGCTAAA	ATTAGAACAG	GAGATTCTGG	540
AATTTATTAA	TGACAACAAC	CACTCGAG				569

(2) INFORMATION FOR SEQ ID NO:302:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

GCGATTGAAT TCTAGACCTG CCACCCAAAC CCCAACTCTC AGACTTACCT CCCAAACCAC	60
AGATGAAGGA CCTGCCCCC AAACCACAGC TGGGAGACCT GCTAGCAAAA TCCCAGACTG	120
GAGATGTCTC ACCCAAGGCT CAGCAACCTC CTGAGGTCAC ACTGAAGTCA CACCCATTGG	180
ATCTATCCCC AAATGTGCAG TCCAGAGACG CCATCCAAAA GCAAGCATCT GAAGACTCCA	240
ACGACCTCAC GCCTACTCTG CCAGAGACGC CCGTACCACT GCCCAGAAAA ATCAATACGG	300
GGGCACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 683 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

ACAGCATGAA GGCAGAAGCC AATGCCCTGC ATCACAAACA CGACAAGAGG AAGCGTCCGG	60
GGAAGAATGC ACCCCCAGGA GGTGATGAGC CACTGGCAGA GACAGAGAGT GAAAGCGAGG	120
CAGAGCTGGC TGGCTTCTCC CCAGTGGTGG ATGTGAAGAA AACAGCATTG GCCTTGGCCA	180
TTACAGACTC AGAGCTGTCA GATGAGGAGG CTTCTATCTT GGAGAGTGGT GGCTTCTCCG	240
TATCCCGGGC CACAACTCCG CAGCTGACTG ATGTCTCCGA GGATTGGAC CAGCAGAGCC	300
TGCCAAGTGA ACCAGAGGAG ACCTAAGCCG GGACCTAGGG GAGGGAGAGG AGGGAGAGCT	360
GGCCCTCCC CGAAGACCTA CTAGGCCGTC CTCAAGCTCT GTCAAGGCAA GCCCTGGACT	420
CGGAGGAAGA GGAAGAGGAT GTGGCAGCTA AGGAAACCTT GTTGCGGCTC TCATCCCCC	480
TCCACTTTGT GAACACGCAC TTCAATGGGG CAGGGTCCCC CCCAGATGGA GTGAAATGCT	540
CCCCTGAGG ACCAGTGGAG ACACTGAGCC CCGAGACAGT GAGTGGTGGC CTCCTGCTC	600
TGCCCCGCAC CCTGTCACCT CCACTTTGCC TTGTTGGAAG TGACCCAGCC CCCTCCCTT	660
CCATTCTCCC ACCTGATCTC GAG	683

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 653 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

GAATTCGGCC AAAGAGGCCT AGAGATGTCT ACTCTCAGCT CACGCCTGTA ATCCAGCAT	60
TGTGGGGAGG TCAAGTTGGG TGGATTGCTT GAGCCCAGGA GTTTGAGACC AGCCTAAGCA	120
ATAGGCAAAA CCCTGTCTCT AAAAAATCA GCCAGGTATG GTAGTGTGTA CCTGTAGTCC	180
TAGCTACTCA GGAGGCTGAG GTGGGAGGAT CGCTTGAGCC TGGGAGGTGA AGGCTGAAAT	240
TAGCCATGAT CATGCCACTG CACCCCAAGC CTGGGCAACA GAGCAAGACC TTGTCTCAA	300
AAAAAAGGA TGAGCTAGGT TTGTATCTGT AGACAGAGAT TTATGATTAA TTGGTAGGTG	360
AAAAAGTGTA TTAAAGTACA GTTATAGATT AGAGTACAAA ATGAATGAGT ATATATGCGT	420


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TAAAAAGTAT GTATACATAT CAGGAAAGGT TACATGAGGA TTTTCACTTT CCACTTTTATA 480
TCTCCCAGTA TTTGAATTTT TAATAACAAT CTTTTTATCA TAAAACTATA TTAAATTAAA 540
CTTTTAGATT TTTTAGTGGT ATAAGTAGAA CAGGAACCCT AATACATTGT TTCTACTTT 600
TGTGATAAAG ATAATTCATG ATAGATGAAG TTGCAAACCG AAAGATCCTC GAG 653

```

(2) INFORMATION FOR SEQ ID NO:305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

```

GAATTCGGCC TTCATGGCCT AAGGTATTCC AAAATGTCTA ATTTATTTTA TCCGATGGTA 60
AATGTAATAA TTAAAGAAAG AGGAAAGAAT CATGAAAGGT GGCCCTTAAA GAGGGCTTCT 120
GGCAGAGTTA GGTGAGAGGC ACACTTTCTT ACAGACTAAG AGTTTTTAAG TACTCAAGGT 180
GATGTTTATC AGAAGCTTGG ACTGCTTCTG TGTCTTTTTA TTGTGCTTAT CTGGGAGGGA 240
GAGTTCTGTG TCTGCTCCTA TACATCTTTC TGCAGCTGCA GACATACTCC CTGAGTCTGC 300
TTTTAGCTTT CCTATCTTAG TGCACCTGAA GGGAAAGGAA TGAGCTTATT AAGGCCCACT 360
GTTTTACTGG GGCCCATTTG ATGAGAGTGA AGTTTGGCAG TTACCCAAGA GACGTTCCCC 420
TCACCTCCCT CCGGCGCTCG AG 442

```

(2) INFORMATION FOR SEQ ID NO:306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

```

GAATTCGGCC TTCATGGCCT ACCAATATGC AAATCAGTAC CTCTTCTCTT AGAGGTGTTC 60
ATGCCCCAAGC TCCTCAGACA AGTCCATCCC ACTGTGTGGG AGGAAGTTGA AGGGTGAGGA 120
TTTTTAAGAT TTTTATCTTG CTTGAAGTTG TGAAGACTCA ATGACAAATG GCTAGGTTTT 180
GAAGGGGTCT TGGAAGTCAT TACTGGGGAT AGACCCCTCT TGATACTTGT CACATTAATA 240
TCTGCCCAGA CTCTCACACA TTCAGATGTT TAACGTCACA TGCATTAAGT TCTTTTGGTT 300
GCATGAGACA GTGATGCACA GAACTCACT TAGGAAAGGA GATAGGTGGC AATAAAGAAA 360
ACAGGGATTT CATAGGAATG CAGTAAAAAA AAAACCATGG CCTAATCTCG AG 412

```

(2) INFORMATION FOR SEQ ID NO:307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

```

GGGGTTGTCT GAGGCCCAGA GGTCGTATAA GGGCCGCTCT ACGGTGTCCT GGGGCCCGGG 60

```

```

CTTGGCCCTT GTTGCAGAAG GGTGAGGAG CCGGGCTGGG CCCTGCGCAC CTCCCGGGG 120
AGCTCGCCCT GCTTGGCCAG CTTCTCCCAT AGCTGCTCCT TCCGCCTGAG CTTCTTGGCG 180
TTGGGGACCT GGTGGGCGAG GACGTCTTG GGGCAGGA CTTTGATGT GTTCTCGAG 239

```

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

```

GCGCACCATC CTGGGAAGTG CATGTCTCAG ACCAACTCCA CTTTACCTT CACCACCTGT 60
CGCATCCTGC ATCCTTCAGA TGAGCTCACT CGGGTCACAC CAAGCCTTAA CTCAGCCCCA 120
ACTCCAGCTT GTGGCAGCAC CAGCCACTTG AAATCCACGC CGGTGGCCAC ACCATGCACT 180
CCACGGAGAC TGAGCCTGGC TGAGTCCTT ACTAACACCC GTGAGTCCAC GACCACCATG 240
AGCACATCCC TGGGGCTCGT GTGGCTGTTG AAGGAGCGGG GCATTTCTGC TGCCGTGTAC 300
GACCCCAAGA GCTGGGACAG GGCCGGCCGG GGCTCCCTCC TGCACTCCTA CACGCCCCAAG 360
ATGGCTGTGA TCCCTCTAC TCCGCCGAAC TCGCCTATGC AGACACCCAC ATCCTCCCCA 420
CCCTCCTTTG AGTTCAAGTG CACGAGCCCT CCTACGACA ATTCCTGGC TTCCAAGCCA 480
GCCAGCTCCA TCCTGAGGGA AGTGAGAGAA AAGAACGTCC GCAGGACCTC GAG 533

```

(2) INFORMATION FOR SEQ ID NO:309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

```

GAATTCGGCC AAAGAGGCCT ACCCTAAAC ATTTATTTC AAGGAGAAAAG AAAAAGGGGG 60
GGCGCAAAAA TGGCTGGGGC AATTATAGAA AACATGAGCA CCAAGAAGCT GTGCATTGTT 120
GGTGGGATTG TGCTCGTGTT CCAATCATC GCCTTTCTGG TGGGAGGCTT GATTGCTCCA 180
GGGCCCCAAA CGGCAGTGTC CTACATGTCG GTGAAATGTG TGGATGCCCG TAAGAACCAT 240
CACAAGACAA AATGGTTCGT GCCTTGGGGA CCCAATCATT GTGGCAAGAT CCTCGAG 297

```

(2) INFORMATION FOR SEQ ID NO:310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

```

GAATTCGGCC AAAGAGGCCT AGGGTTTAAG AGCTGTGGAG GACTGAAAAC TGGATAAAAA 60
GGGGGTCTTT TTCCTTGCCC CTGTCTCTCA CTCAGATGCG CTTCTTTTTC GCCACTGTTT 120
GGCAAAGTTT TCTGTTAAGC CCCCAGTTCT CCAGGTGCGT TACTATTTCT GGGATCATGG 180

```

GGTCAGTTTT AGGACACTTG AACACTTCTT TTCCCCCTC CCCAGTTCTC CAGGTGCGTT 240
ACCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

GAATTCGGCC AAAGAGGCCT AGGTAAATAA CTAATATTGA TGTATTTTTA TATTTTAATA 60
TAGACTAGTA AACTATGCAG AGTTAAGTGT TACATTAGAA TCTTGAAC TCCTAACATT 120
TCTCTTCCTC AGTTTCCTAT TGTTTGGTA GAGTATGTAG ACATTGCGA GATTAATTTA 180
GAGTTGGTAG ATACATTCTG GATTTCAATT TACTTTAGAT AGCAGGTTTG GCACTTTAAA 240
TATATTTAAT TCAGTAAGAG AATAACTGAG TATGAGCTGT ATCCTCATCT TACTGTTGAA 300
GACATCCCAA ATAGTTGGGT GTGCACTGTG GCGGATCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:312:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

GAATTCGGCC AAAGAGGCCT ACGGGGAGGC GCGCCCGCGC TGAGTCGGCG GCGGGTAGCC 60
ACTCCATGCC CTTGTCCGAT GGTTCGCAAC TCCGATTTG CACACCGCTC CACCGTGCCC 120
CCCAGCGCAC ACCCATTCAC ACTCAGGCCA AACTCTCGC TGAACACTTT TATAATTGTT 180
AGGCGTGGCC GTTGGGACTT TGGGCGCAGC GCGGCTGATA CTGCGTCTGG AGGATTGATA 240
TTTACTTTTG CATTGCGGTT ACCTCGAG 268

(2) INFORMATION FOR SEQ ID NO:313:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

GTCTCTCGCC GCCGGAGGAA GATGANGCTG AAGATTGGAT TCATCTTACG CAGTTTGCTG 60
GTGGTGGGAA GCTTCCTGGG GCTAGTGGTC CTCTGGTCTT CCCTGACCCC GCGGCCGGAC 120
GACCCAAGCC CGCTGAGCAG GATGAGGGAA GACAGAGATG TCAATGACCC CATGCCCAAC 180
CGAGGCGGCA ATGGACTAGC TCCTGGGGAG GACAGATTCA AACCTGTGGT ACCATGGCCT 240
CATGTTGAAG GAGTAGAAGT GGAATTAGAG TCTATTAGAA GAATAAACAA GGCCAAAAAT 300
GAACAAGAGC ACCATGCTGG AGGAGATTCC CAGAAAGATA TCATACTTCT CGAG 354

(2) INFORMATION FOR SEQ ID NO:314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCGGCC AAAGAGGCCT AGTGCAAGAA CATGAAGCAC CTGTGGTTTT TCCTCCTGCT      60
GGTGGCAGCT CCCAGATGTG TCCTGTCCCA GGTGCACCTG CAGGAATCGG GCCCGGGACT      120
GTTGAAACCT TCGGACACCC TGTCCCTCAC CTGCTTTGTC TCGGGTTACT CCCTCAGTAG      180
TGTTCACTAT TGGGGCTGGA TCCGCCAGTC CCCAGGGAAA GGACTGGAGT GGATTGGGAA      240
CATCCATCAC AATGGTAGAA CCAATTACAA CCCGTCCCTC GCCAGCCGCG GTTCCATCTC      300
AGCCGACACG TCCAGAACT CCCTCTCCCT GAATCTGACC TCTGTGACCG CCGCAGACTC      360
GGCCGTCTAT TTCTGTGCGA GCGGCCCTAT TGCTCCTTT GAATCGACGA CTCTAAAGGT      420
GGGCGGAGAC TTCACTCCT GGGGCCAGGG AATCCTGGTC ACCGTCTCCT CAGCATCCCC      480
GACCAGCCCC AAGGTCTTCC CGCACAGCCT CGAG                                         514

```

(2) INFORMATION FOR SEQ ID NO:315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

```

GAATTCGGCC AAAGAGGCCT AGGACACTAG AATTATTAGT GTTCATTTTC ATCTAAGATC      60
TTTATTCTCT AACGTTCTTG GTCCTATTGA AACATTGCAG TATGCAAAAC TACTGCAATG      120
TTAAACCCAA GAGAAAAGCC ATTATCATGT GTATGCTGGT CATCATGATC AGTGTGGTAC      180
AATTTTAAA AATAAACTAT CATGCCCTTC TCAG                                         215

```

(2) INFORMATION FOR SEQ ID NO:316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 788 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

```

GAATTATGTA CGCCCTCTTC CTCCTGGCCA GCCTCCTGGG CGCGGCTCTA GCCGGCCCGG      60
TCCTTGGA CT GAAAGAATGC ACCAGGGGCT CGGCAGTGTG GTGCCAGAAT GTGAAGACGG      120
CGTCCGACTG CGGGGCAGTG AAGCACTGCC TGCAGACCGT TTGGAACAAG CCAACAGTGA      180
AATCCCTTCC CTGCGACATA TGCAAAGACG TTGTCAACCG AGCTGGTGAT ATGCTGAAGG      240
ACAATGCCAC TGAGGAGGAG ATCCTTGTTT ACTTGGAGAA GACCTGTGAC TGGCTTCCGA      300
AACCGAACAT GTCTGCTTCA TGCAAGGAGA TAGTGGACTC CTACCTCCCT GTCATCCTGG      360
ACATCATTA AGGAGAAATG AGCCGTCCTG GGGAGGTGTG CTCTGCTCTC AACCTCTGCG      420
AGTCTCTCCA GAAGCACCTA GCAGAGCTGA ATCACCAGAA GCAGCTGGAG TCCAATAAGA      480

```

TCCCAGAGCT	GGACATGACT	GAGGTGGTGG	CCCCCTTCAT	GGCCAACATC	CCTCTCCTCC	540
TCTACCTCA	GGACGGCCCC	CGCAGCAAGC	CCCAGCCAAA	GGATAATGGG	GACGTTTGCC	600
AGGACTGCAT	TCAGATGGTG	ACTGACATCC	AGACTGCTGT	ACGGACCAAC	TCCACCTTTG	660
TCCAGGCCTT	GGTGAACAT	GTCAAGGAGG	AGTGTGACCG	CCTGGGCCCT	GGCATGGCCG	720
ACATATGCAA	GAAGTATATC	AGCCAGTATT	CTGAAATTGC	TATCCAGATG	ATGATGCACA	780
TGCTCGAG						788

(2) INFORMATION FOR SEQ ID NO:317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

GAATTCGGCC	AAAGAGGCCT	AAATCATCCT	GATGATGGTT	TTCTTACATA	AACATGAGCT	60
TCTGACCATG	TACCATGGAT	GGGTTCTCAC	TTCTTGCTAT	ATCCTGATCA	TCACTATTGC	120
AAATATTGCA	AATTGGCCA	GTACTGCTAC	TGCAATCACA	ATCCAAAGGG	ATTGGATTGT	180
TGTTGTTGCA	GGAGAAGACA	GAAGCAAAC	CGAG			214

(2) INFORMATION FOR SEQ ID NO:318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

GTTGTCTTTT	TTCCCCTTTA	TAGCTGCTGG	AGTGAATTTT	AGAAAGCCTA	AGTCATACAT	60
CACATTGCTT	CATGGGCATC	CCAGTACACT	TTGGATTTTA	TTTACATCC	TTACTGATCT	120
GATTCTCATC	TCTGTCTCTT	CATGTTCTC	TGCCTTCTAG	TTACTGTTGT	GACCTTTCAA	180
AACCTTTACC	ACATTGAGTT	CATTCCTTAC	TTTCACTCT	TTCTCTGCCT	GGAGTGTCT	240
GCCCCATCTT	TACGTGGCAC	GCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

GAAGCTTTCA	GGCTATCTTC	TAGTCAAGAT	GAGTGATAAG	CCAGACTTGT	CGGAAGTGGA	60
GAAGTTTGAC	AGGTCAAAAC	TGAAGAAAAC	TAATACTGAA	GAAGAAAAAT	ACTCTTCCCT	120
CAAAGGAAAC	TATCCAGCAA	GAGAAAGAGT	GTGTTCAAAC	ATCATAAAAA	GGGGATCGCC	180
TCCCAACAGC	AGATTTCGAC	ATTACCTGAG	AGTCTTGATT	TAGGCTTGT	TTTTGTAAA	240
CCCATGTGTT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

```

GCTGCGTGTG ATGGAGACCA AACCCGACAA GGCAGTGTCC ATCATTGAGT GTGACATGAA      60
CGTGGACTTT GATGCTCCCC TGGGCTACAA AGAACCCGAA AGACAAGTCC AGCATGAGGA      120
GTCGACAGAA GGTGAAGCCG ACCACAGTGG CTATGCTGGA GAGCTGGGCT TCCGCGCTTT      180
CTCTGGATCT GGCAATAGAC TGGATGGAAA GAAGAAAGGG GTAGAGCCCA GCCCTCTCCC      240
AATCAAGCCT GGAGATATTA AAAGAGGAAT TCCCAATTAT GAATTAAAC TTGGCGCGCT      300
CGAG                                         304

```

(2) INFORMATION FOR SEQ ID NO:321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

```

GAATTCGGCC AAAGAGGCCT ACTCTTACAC CTTCCGCTCC GTGGGCACCT TCAATATCAT      60
CGTCACGGCT GAGAACGAGG TGGGCTCCGC CCAGGACAGC ATCTTCGTCT ATGTCCTGCA      120
GCTCATAGAG GGGCTGCAGG TGGTGGGCGG TGGCCGCTAC TTCCCCACCA ACCACACGGT      180
ACAGCTGCAG GCCGTGGTTA GGGATGGCAC CAACGTCTCC TACAGCTGGA CTGCCTGGAG      240
GGACAGGGGC CCGGCCCTGG CCGGCAGCGG CAAAGGCTTC TCGCTACCG TGCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

```

GCGCCGTGTC CTTTTCGCTT GGTACCAGCG GCGACATGAC GGGGTACACT CCGGATGAGA      60
AACTGCGGCT GCAGCAGCTG CGAGAGCTGA GAAGGCGATG GCTGAAGGAC CAGGAGCTGA      120
GCCCTCGGGA GCCGTGCTG CCCCCACAGA AGATGGGGCC TATGGAGAAA TTCTGGAATA      180
AATTTTGGGA GAATAAATCC CCTTGGAGGA AAATGGTCCA TGGGGTATAC AAAAAGAGTA      240
TCTTTGTTTT CACTCATGTA CTTGTACCTG TCTGGATTAT TCATTATTAC ATGAAGTATC      300
ATGTTTCTGA AAAACTCGAG                                         320

```

(2) INFORMATION FOR SEQ ID NO:323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```
GCAAAAATCT CAGGCCCCAG AAAAGCCTCT TGTCTCTCT CAGATGGGTT CCAAAAAGAA      60
GCCCAAAATT ATCCAGCAAA ACAAAAAGA GACCTCGCCT CAAGTGAAGG GAGAGGAGAT      120
GCCGGCAGGA AAAGACCAGG AGGCCAGCAG GGGCTCTGTT CCTTCAGGTT CCAAGATGGA      180
CAGGAGGGCG CCAGTACCTC GCACCAAGGC CAGTGAACA GAGCACAATA AGAAAGGAAC      240
CAAGGAAAGG ACAAATGGTG ATATTGTTCC AGAACGAGGG GACATCGAGC ATAAGAAGGA      300
ACTCGAG                                     307
```

(2) INFORMATION FOR SEQ ID NO:324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```
GCACTTCTGA GAGGATGCTG GGAATCTGCA GGGGGAGACG GAAATCTTG GCTGCCTCGT      60
TGAGTCTTCT CTGCATCCCA GCCATCACCT GGATTACCT GTTTTCTGGG AGCTTCGAAG      120
ATGGAAGGCC CGTGTCTCTG TCACCGCTGG AGTCCCAGGC ACACAGCCCC AGGTACACGG      180
CCTCCAGCCA GCGGGAGCGC GAGAGCCTGG AGGTGCGCAT GCGCGAGGTG GAGGAGGAGA      240
ACCGCGCCCT CCGCAGGCAG CTCAGCCTGG CCCAGGGCCG AGCCCCACCC ATCCTCGAG      299
```

(2) INFORMATION FOR SEQ ID NO:325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

```
GAATTCGGCC TTCATGGCCT ACTCCAACT CATGCCCTTG TTTTATCTC TGCCCTTGGA      60
TGGCTGTCTT CTATTTTAC TCACAATTTC AACACATTTT GACTTGCTCG TGTCACCTAG      120
GGTTTCCGCC TCAGGTATGT CTTCTTCCTT AATTCTTTG CCGTCTTTGG TGCTGTTGAC      180
CTCACCTTT CTGGGTCTT CCTATTGGTC TCAGCTTCAG GTTTGCAGCC GCCCCTGGTT      240
TCCTGAACAT TCCTTCTGTG GGGTCTTCCC CTCCTTCTCA CCCACCCTCG AG          292
```

(2) INFORMATION FOR SEQ ID NO:326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

GAATTCGGCC	TTCAGACTTG	AAGTGGAGAA	GGCTACGATT	TTTTTGATGT	CATTTTGTGT	60
AAGGGCGCAG	ACTGCTGCCA	ACAGAGTGGT	GATAGCGCCT	AAGCATAGTG	TTAGAGTTTG	120
GATTAGTGGG	CTATTTTCTG	CTAGGGGGTG	GAAGCGGATG	AGTAAGAAGA	TTCTTGCTAC	180
AACTATAGTG	CTTGAGTGGG	GTAGGGCTGA	GACTGGGGTG	GGGCCTTCTA	TGGCTGAGGG	240
GAGTCAGGGG	TGGAGACCTA	ATTGGGCTGA	TTTGCTGCT	GCTGCTAGGA	GGAGGCCTAG	300
TAGTGGGGTG	AGGCTTGGAT	TAGCGTTTAG	AAGGGCAAAC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 474 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC	TTCATGNCCT	ACCTTTCCGT	CCGTTCTTTC	ACGCCCTTCCT	CCTCATTTTC	60
CTTCCTTCTA	TTTCCCTTC	CCTCTTTCCG	CTTTCCTGCC	CCGTTTCCTT	CCTCCCTCCC	120
TTCCCTCCTC	CTTCCTTCCT	CTGCGTTCTT	CCTCTCTCCT	TTGTTCTTTC	CTCCTCCTCC	180
CCACTCCCTT	TTCTCTCCT	CTTCCCACCC	CAGTCTCCTA	CTCCCCAGTC	CTCCCATCCC	240
CATGGAACAT	ACACCTGCTT	TGTCTGGGAG	CCACGTTATT	CCTGCCAGCC	AGACCCCTGGC	300
CAGGAGGATC	AGGATCACGG	TCAGCTTGGG	CCGAGAACCC	ITCACATGAG	ACAAGCTCCT	360
CTGCCAGGGT	TTCTGTGGG	AAAGGCCCCA	CTTCCCGACC	CTCCTGGGCC	ACTGCATGGG	420
GTCCCTCTT	CGGCTTCTTC	TCCCCTCTCC	ACCCGGCAGC	CCCCCAGCT	CGAG	474

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 556 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

GAATTCGGCC	AAAGAGGCCT	AATTTACTCC	CCAATATAAA	ACATTTTACC	TGCGATCTAT	60
GTGTACATAT	TGAATGATGT	GTAACAATAT	CATAATTTTT	ATGTTCTGCA	TTTTTTCATC	120
TATATATCTT	TATTTAAATG	GACTTAACTT	TACTAATGGA	GTAATTTTTA	GCTTTCAGAA	180
GGAGTTCTCA	CTCGAAGATA	AAGAACAGCT	CGCTAACCAC	GAAAGAGGAA	TCGATGCTCA	240
GCTTTTAGTT	GCACTTCCTA	AAGTTGCAGA	ATTAAGACAA	ATCTTTGAAC	CAAAGAAGAA	300
AGAATTCTTA	GAAATGAAAA	GAAAAGAAAG	AATTGCCAGG	CGCCTGGAAG	GGATTGAAAA	360
TGACACTCAG	CCCATCCTCT	TGCAGAGCTG	CACAGGATTG	GTGACTCACC	GCCTGCTGGA	420
GGAAGACACC	CCTCGATACA	TGAGAGCCAG	CGACCCTGCC	AGCCCCCACA	TCGGCCGATC	480
AAATGAAGAG	GAGGAACTT	CTGATTCTTC	TCTAGAAAAA	CAAACCTCGAT	CCAAATACTG	540
CACAGAAACC	CTCGAG					556

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 385 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

GAATTCGGCC	AAAGAGGCCT	ACAAAACCAT	CCATAAATAA	ACAAAGCTAA	GAAAGCTAAG	60
AAACAAAGCT	AAGAAACAAA	GACTGAGGTG	AGGGAGATTT	GAGTATTTTT	TTTTCTCTA	120
CCAACAAGTG	AAGAATTGAA	CACCTTAATC	CATCTGATCT	CCCAGGTGGA	AGCCACAAAT	180
CTTTTTTTTT	GTTTGTCTCA	GCATATTGGC	ACAGTGAGAA	ATTCATTTTA	TACTCTCTGG	240
CATCTCTCTT	GTAACCTCAC	CAAGTCTCAA	TAAGTTCACA	AAGAAGGCAG	AGACAAATAA	300
CCCTAGAATG	CAGGTGATTG	TTTATTTATG	TATTTTCCTT	GTTACATACC	CACCTATACC	360
CAAGGCCTTT	GCAGAAAAGC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 696 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

GAATTCGGCC	AAAGAGGCCT	AGGAAGCAGG	AGTTTATTTT	TATCCTTTTG	TAAGTATTAA	60
CTCGGTAATC	ACAACAAACA	CGGAGCAATC	TCAATGCTGT	TTATCCGGAG	GACAGTCTGC	120
GGGGTCGTGA	CGATTCTTTT	CTTCTTGAAG	TTTTTCCTTT	TCCTGAATCT	CATAATGATT	180
CTTGGCCATG	ATTCTGTCTT	TTCAATGACT	GTGGCTTCTA	CTCGAACAAG	ATCCTTTCCG	240
AGGAGTGGCT	TGCCAAGCAG	CGTGAAGTTG	TCTGCCCCAA	CCAGCAGGAC	CTTCTCCAGT	300
CGAATTCTCT	CTCCACACGC	AAGGTCTAGT	TCATTCCAA	TTAAGATCAG	GTCTTCAGAG	360
GTCACCTTCC	ACTGGCGGCT	GGCAAAGTGC	ACCACGGCAA	AGAGCCTGCC	ATACTGCCCC	420
GTGACGATCA	TCTCATTAC	TTTCTTCACG	ACCTCTGCAT	GGTGTCTGGT	CTCCTCAACT	480
GGGTCTGGCA	GAACAACCTC	TGGCCAAGGT	GGTGAATCTA	GGGATGTTTT	AGGAACATAT	540
CCTGGTAGAT	ATGAAGTGCT	CTGTGAATTG	AACCTTCGAG	AAGCAGACCA	AAGGGAGGCT	600
GCTCCGGGCC	CCGAAGGTCT	CAGGATGCTG	TGGCTGCACG	CGGACGCCAG	CCGCCCTAAG	660
GTGACCGTCA	GGGAAGATGC	TGCCATGGCC	GCCGCC			696

(2) INFORMATION FOR SEQ ID NO:331:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

GAATTCGGCC	AAAGAGGCCT	AATTTTTTGT	ACATCTGGGC	CCTTAGTTTT	TATTCTGTTT	60
ATTATATGTC	TCTGTCTCTC	TCTATTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	120
GTGTGTGTGT	GTGGTGCAGG	AGTGCCACCC	CCAGGGCCCT	GTCAACCTCT	CTTTTCTCCT	180
CCATGGCTGT	CTGCCTGCGT	ATCTGTCTCT	GAGAATCCTC	GGGGCGGTCA	GGGGATGTCA	240
GGAGGGGAAG	GAGCCGCCCT	CCCTATCTTG	CTGCTCCTCT	TGGCACTCAG	GGGCACCTTC	300
CATGGAGCCA	GACCGGGTGG	AGGGGCTTCT	GGGATTGGT	GTCTGCTGCT	GCCAGAGCAG	360

GAACCCCCAG TACTCGAG

378

(2) INFORMATION FOR SEQ ID NO:332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

GAATTCGGCC TTCATGGCCT ACATTGGGAT TATTGGTGCT GTGACCATGG CTGGCATCAT	60
GGCGGCAGAC AGAAGTGAAT CACCTAGTTT GACCCAAGAG AGAGCCAACC TGAGCGATGA	120
GCAGTGCACA CAGGTGACCT CCTTGTGCA GTTGTTTCAT TCCTGCAGTG AGCAGTCTCC	180
TCAGGCCTCT GCACTTTACT ATGATGAATT TGCCAACCTG ATCCAACATG AAAAGCTGGA	240
TCCAAAAGCC CTGGAATGGG TTGGGCATAC CATCTGTAAT GATTTCAGG ATGCCTTCGT	300
AGTGGACTCC TGTGTTGTTC CGGAAGGTGA CTTTCATTT CCTGTGAAAG CACTGTACGG	360
ACTGGAAGAA TACGACACTC AGGATGGACT CGAG	394

(2) INFORMATION FOR SEQ ID NO:333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

GAATTCGGCC AAAGAGGCCT ACTTATTTTC CTGTGAAAAT GCCTACCACA AAGAAGACAT	60
TGATGTTCTT ATCAAGCTTT TTCACCAGCC TTGGGTCCCTT CATTGTAATT TGCTCTATTC	120
TTGGGACACA AGCATGGATC ACCAGTACAA TTGCTGTTAG AGACTCTGCT TCAAATGGGA	180
GCATTTTCAT CACTTACGGA CTTTTTCGTG GGGAGAGTAG TGAAGAATTG AGTCACGGAC	240
TTGCAGAACC AAAGAAAAAG TTTGCAGTTT TAGAGATACT GAATAATTCT TCCCAAAAAA	300
ACTCTGCATT CGGTGACTAT CCTGTTCCCTG GTCCTGAGTT TGATCACGTC GCTGCTGAGC	360
TCTGGGTTTA CCTTCTACAA CAGCATCAGC AACCCTTACC AGACATTCTT GGGGCCGACG	420
GGGGTGTTACA CCTGGAACGG GCTCGGTGCA TCCTTCGTTT TTGTGACCAT GATACTGTTT	480
GTGGCGAACA CGCAGTCCAA CCAACTCTCC GAAGAGTTGT TCCAAATGCT TTACCCGACT	540
CCTCGAG	547

(2) INFORMATION FOR SEQ ID NO:334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

GAATTCGGCC TTCATGGCCT AGGGGAAATT GAGTCAAGAA AAGGTTCAAT ATTTTTTAAT	60
GGTAGAATTG ACCGTATGTG TATGTGCTTC TAGAAGTGAT TCAGGAGAGA GGGTGGAATG	120

GATGGTGTGG	GACGGAGGGA	AGAATTGGTC	GAATGATGTT	GGCAAAAAGG	AATAGGCTTT	180
TGTGCATAAG	TTGAGGGATT	GGCCTTGCCT	AGAAACATGG	ACAATTCGTC	TATAGTAAGA	240
AGAGAAAAGG	TAGATCTATG	ACCACAGACA	TAGTCAGATA	ATCATTTTAA	AATTCTTTAA	300
TCAATAGATG	TTTCTGATGT	ATGGCAGGCA	GTAAGCTAAG	CAGTTTACAT	ACCTGATTTC	360
ATTTAGTTAT	TATAACAATC	CCAGTCTAAA	ACTCGAG			397

(2) INFORMATION FOR SEQ ID NO:335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

GAATTCGGCC	TTCATGGCCT	ACTCCATCCT	TAAGGTCACC	ATTGGTATGT	TCCTGCTCTC	60
TGGAGATCCC	TGCTTCAAGA	CGCCACCATC	GACTGCCAAG	TCCATCTCCA	TCCCAGGCCA	120
GGATTCCTCC	CTGCAGCTGA	CGTGTAAGGG	TGGTGGGACC	AGCAGTGGGG	GCAGCAGCAC	180
CAACTCCCTC	ACTGGGTCCC	GGCCCCCAA	GGCTCGGCCC	ACTATTCTCA	GCTCAGGGCT	240
GCCAGAGGAA	CCCAGCAGA	ACCTGTCCAG	CCCTGAGGAG	GTGTTCCACT	CTGGCCACTC	300
CTCGCAACTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:336:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

GAATTCGGCC	AAAGAGGCCT	AGATTGAATT	CTAGACCTGC	CTCGGCCTCC	CAAAGTGCTG	60
GGATTACAGG	CTTGAGCCAC	CACACCTGGC	CTAGTGATT	GTAATTTTCAT	GAGCTGTTGC	120
TGTATTGCCT	TCCACAGACA	GTCAATTTAT	AATCCCTCAG	TATTATATAA	TCAGGAAGAT	180
TCAGTGAATG	GAATTTTGGG	TTGGTGGAGG	ACATATTTTT	TAATTGGTAG	ACCACTGAGT	240
GCTTTTGCAA	ATCTCCTTAA	ATCACATTAC	AGCAGGAACA	ACTATAGAAA	ATACAATTAT	300
TTAGGAGCAA	CCTGATCTGT	GAGCTAATTT	AATGAGTGGA	GCCCAGCCTA	CATGCTGAAG	360
AGCTCACATG	CCTCCTACCT	AGTTCCTTAA	CTAGGTTTTC	ACTCATGCCC	ATTTTGTGAT	420
ACTCTTGAAA	CCTTCCTATC	TTTGCATAGA	ACATTATTCT	TTCCACT		467

(2) INFORMATION FOR SEQ ID NO:337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

GAATTCGGCC	AAAGAGGCCT	ACTTCTTTGA	AGAACCATGA	AGTCACACTA	TATTGTGCTA	60
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GCTCTAGCCT	CCCTGACGTT	CCTGCTGTGT	CTCCCCGTGT	CCCAGAGCTG	TAACAAAGCA	120
CTCTGTGCCA	GCGATGTGAG	CAAATGCCTC	ATTCAGGAGC	TCTGCCAGTG	CCGGCCTGGA	180
GAAGGGAAC	GCCCTGCTG	TAAGGAGTGC	ATGCTGTGCC	TCGGGGCCCT	GTGGGACGAG	240
TGCTGCGACT	GTGTCGGTAT	GTGCAACCCT	CGGAATTACA	GCGACACCCC	GCCCACATCC	300
AAGAGCACCG	TGGAGGAGCT	GCACGAGCCC	ATTCCGTCCG	CTGTCGAG		348

(2) INFORMATION FOR SEQ ID NO:338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

GAATTCGGCC	TTCATGGCCT	AGCCAGTCTT	CAGTTATAAC	CACTCCACCC	TCCTCACTTT	60
CTCTCTCTCT	CTCTCTTTTT	TTTTTTTTTT	TTTTTTGCTA	TGGGATTTAA	TGGGAAAAAT	120
ATGTAAAAAC	TGTCACTAGT	CAGCTGGCTC	TTTTTCCTAT	GAAATCTATC	AGTACCTTTC	180
TCCATCCGTT	GTTCTCAATA	ATGACCACAC	AGCCTGAGTA	TACCAAGAAA	ACCAATATTC	240
GCATTACAGG	TCACTCGAG					259

(2) INFORMATION FOR SEQ ID NO:339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 183 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

GAATTCGGCC	AAAGAGGCCT	AGCCTTCTGC	AAGATGCTTC	TGATTCTGCT	GTCAGTGGCC	60
CTGCTGGCCT	TCAGCTCAGC	TCAGGACTTA	GATGAAGATG	TCAGCCAAGA	AGACGTTCCC	120
TTGGTAATAT	CAGATGGAGG	AGACTCTGAG	CAGTTCATAG	ATGAGGAGCG	TCAGGGACCA	180
CCT						183

(2) INFORMATION FOR SEQ ID NO:340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

GAATTCGGCC	TTCATGGCCT	AGTTTTAACT	GAGTGCAACA	AGTATTTTCG	TTAAGAGATT	60
TTTTTTCGTA	ATTTACCATT	CTGCTGAATC	AATTTTAAAT	CCAGTTGGAA	GCTCTAAAAT	120
TCTAACATAA	TTCAGAAGCA	TTAAAAAGA	AGACTAAGGA	AGAGAAAGCT	ACATTTTAT	180
TTAGCTTGT	ATTGCATTGT	GCAGAAAGGA	AAATAGTCTA	GCTAATTAC	TTTTCCTATG	240
AAAAACCTTA	GAAGGCTCCT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

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GAATTCGGCC TTCATGGCCT AGCCTTTCTA GTCTTCCCTC TTCTGTAGGA ATANCATGTT      60
CCTCAAATGG TCCTGAACCT TTTCACCATT TTGGTGAACC CTTTAAAGT AAATTACTC      120
AATGCTTTAA AATTCATAGT CTTAAATAA ATGTGAATTT TGTTTCCAGG TATTTATTCT      180
GGGGTACAAA AACTTCCAG AATTTACAGT AGGAAAGGAA ACCCCTTTAT GATGTGGCTT      240
ATTATTACAA GCATTCAGAA ATGATGCTGG CTAAGTCAAA TCATTCCTTG AGACAGTGAT      300
TCCTAAATGT AATGCCGCCT TCCTGAACTC TCACATATTC TATATCATGG TTATTTTAAA      360
AAATATATTT TAGCCTTTT GTAACCTTAG TCTGTTTTG AGCAATCTCG AG              412

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(2) INFORMATION FOR SEQ ID NO:342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

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GAATTCGGCC TTCATGGCCT AGGGATTATA GGTGTGAGCC ACCGCGCCCG GCCAGGAATC      60
ATTTTTATCC AGGTAAGGCA TACAGAACCG GAGGGTTCTT GTCTAAGTTG TACCATGAAT      120
GTGTGCTCAG TGGCTACTTT GAAATAGACT TACTGTACAA TCCCTGAGCA GGAATGAAAA      180
TAAAAGCTGG AAATCACGGG TTGCTCTGGG GTTTTCAGGA AGGTGTCGTC CGTCTGGGGT      240
GAGTGTCTC CTTTCTCANG GGATTTCATG TGGCATTATT TTGTTTTCAT CTGAGAGGCA      300
ACATAAGCTG GGAGGGAAGG GCTGCAAAGA GGGGGCCAGG ACAAATGTGT ACCTGGGGGC      360
CCCCATTTTG ACTCCACCCT GAGCTGGGGC TGGGCCACAG GAGGGCAGAG GGAACACTTT      420
GGGACGGGGA GGGAGCCCCT GGA CTGAAAG AATGGGGTGA CTCGAG              466

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(2) INFORMATION FOR SEQ ID NO:343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

```

GAATTCGGCC TTCATGGCCT AGAATTTTGG AGTCTTTATC ATAGGTAACC TGGACCACAG      60
TTACTATTTA TTGACAATGT GATTGAGTGT ATGGAGGAAA GCACAGTGGA TGCTAGGCTT      120
TGTAATATG GGGATGTAGA AAAGCAGATA GTTCAGTGTC TACCTTTTTC TAGAACTACC      180
TTGAACCTTA AATTTTAAAGT CATGTTTATT GCTAGAAAAT TAAATGTACT TATTAAAACC      240
AATGAAAAAG CACATTTCTG AAATGAAGTT AGAGATAATC TCTGTGTCTT ATAAAAAGAC      300
ATTAATAAAA ATCTGGTAAG GACTCGAG              328

```

(2) INFORMATION FOR SEQ ID NO:344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

```

GAATTCGGCC TTCATGGCCT AGTGACCAGA CATAAGAACT CATTTTTAGT TAAAGCATTT      60
TAAAAAAGTA TACAAGGCAG AGTTGCAAAC AATCTCAGCC TATGAAAAGG ACAGCTGCAG      120
TCAATGTTCC CACTAATATT TTCCATCCGT GACTGAGTG AATTTGTAAT GTGCAACTCA      180
TGTCAGAGAAA ATAAACAGAT GTGCACCACA AGCGGAACAA CAATGAAAGA ACTTACATAG      240
ATTTTTATTA AGATTGAACT TTIGATGTTG ATTCCACTGG TAAGAGAGCA CTGTAGGCAA      300
AGGTCTTGTA TTTATAAAGT TATCTCCTAT TGAGGAAGAT GAAGATGTCA ATACTCCCCA      360
ACAGAATGCT TTGAGCTCTT TCTAGTAGAT CTGTGCCAAC TCTGAAACAC CTCGAG      416

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(2) INFORMATION FOR SEQ ID NO:345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

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GAATTCGGCC TTCATGGCCT AGTAAATACA AAATACAAAA ATACTGGTGA GAGAATGGGA      60
TGATGATTAT ATTCTGGTT CAGTTTTTCT TCCTGAGAAA TTTGATAATA CATCTTTTGA      120
TTTTTAATAA GTGAAATAAC TGGTGA CTGT GTTGTATGTG TGTGTGTGTG TTTTTTTTTT      180
TTTTTTTAAA TAGAAGTGTG AAAAGAACT TCATCCACGG AAATTCAGG ATAATTTTGA      240
AACAGGCAAG TCATTTCTTA TCTTTTATA ATCTCTGCCT TGTGGGATTT GGTGTTGTTT      300
ACCTAACTTT GATTTTAGTG GGAGTATGTG AGCTGTGACT CGAG      344

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(2) INFORMATION FOR SEQ ID NO:346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

```

GAATTCGGCC TTCATGGCCT AGCCTTCGGA ACCCCACCAG AGTCACAGCC AGGAAGGGCA      60
GCGGGGCGCA CCAGGCCGAA GGCTCACGCC ACAGGGAGGG CAGCTAGGAC ATGGGGGGAA      120
GCGCGTTAAA CCAGGGAGTC CTGGAAGGGG ACGACGCCCC CGGCCAGTCC CTGTACGAGC      180
GGTTAAGTCA GAGGATGCTG GACATCTCGG GGGACCGGGG CGTGCTGAAG GACGTCATCC      240
GAGAAGGAGC TGGAGACCTA GTGGCGCCTG ATGCTTCGGT GCTAGATGCT TCGTCTGGG      300
TAAACTCCTC GACTCCCAAG GCCCAGCTC CATCTTTACC TCAGAGCCTC CTGAACCTCC      360
TCCTCCAGCC TCACCTTCCT CCAGCCTCAC CACTCCTCCC TGGACCTGCA GCTCCGCACC      420
CCCGGGGGCC TCAGAACTAC CCCTTCCAGG GCCTCAGAAC TACCCCTACG GTTCTCCTG      480

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CGTAACCTTC TGCCTACCTT CCTGAGAGTG GTTGGTGACA GCAGCCGGGG CTAGAAACCT 540
CGAG 544

(2) INFORMATION FOR SEQ ID NO:347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GCCTTCATGG	CCTACCCAGT	GATTGTCACC	ATGGCCAGCA	AGAGGAAATC	CACCACACCA	60
TGCATGATCC	CAGTGAAGAC	TGTGGTGTG	CAAGATGCCA	GCATGGAGGC	CCAGCCCGCT	120
GAGACCTTGC	CTGAAGGACC	CCAGCAGGAT	CTGCCCCCAG	AAGCATCTGC	TGCCAGCAGT	180
GAGGCAGCAC	AGAACCCAG	CAGTACTGAT	GGCTCTACAC	TGGCCAATGG	GCATCGGAGC	240
ACTTTAGATG	GCTATTATA	TTCCTGTAAA	TACTGCGATT	TCAGATCCCA	TGACATGACC	300
CAATTTGTGG	GACATATGAA	CTCAGAGCAC	ACAGACTTTA	ATAAAGACCC	AACCTTTGTA	360
TGCAGTGGGT	GCAGTTTCT	GGCAAAAACC	CCTGAGGGGC	TTTCCTTGCA	CAATGCCACA	420
TGTCACCTCC	GGGAAGCCAG	CTTTGTGTGG	AACGTGGCCA	AGCCAGACAA	TCATGTGGTT	480
GTGGAGCAGA	GCATCCCTGA	GAGCACCAGC	ACTCCTGACC	TAGCGGGTGA	GCCCAGTGCT	540
GAGGGGCTG	ATGGACAGGC	AGAGCTCGAG				570

(2) INFORMATION FOR SEQ ID NO:348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC	TTCATGGCCT	AGAAAAAAGT	TTTCAAAGGG	AAGTAATCTT	AAATCTGTAT	60
ACTATTTTCT	ATGATGGAAA	TTCTGTGAAG	AAACAATAAC	AAATCTCCCC	TGACTCCTGT	120
CTGTCCTAAT	AGTAAGGTGG	TCTTTCTTCT	AATCTCCCCA	TCCATCCACC	CATCAGGAAG	180
CAACAGGGTA	CCTTGTGTGA	GTAAGTGTAG	ATTTCTGACT	TCTTCTCGCA	CCTTCAGCTG	240
GAGCACCTGT	TGTAAGATGT	GCTGCCGGAG	GTTCTCCTGG	GCAATCCCCA	TTGCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

GAATTCGCCC	TTCATGGCCT	AACAACCACC	ACCACCTGGA	CGCCCAGCAG	CACAACCACC	60
ATAGCCGGCC	TCAGGGTCAC	AGAAAGCAAA	GGGCACTCAG	AATCATGGCA	CCTAAGTCTG	120
GACACTGCCA	TCAGGGTTGC	ATTGGCTGTC	GCTGTGCTCA	AAACTGTCAT	TTTGGGACTG	180

CTGTGCCTCC TCCTGTGGTG GAGGAGAAGG AAAGGTAGCA GGGCGCCAAG CAGTGACTTC	240
TGACCAACAG AGTGTGGGGA GAAGGGATGT GTATTAGCCC CGGAGGACGT GATGTGAGAC	300
CCGCTTGTGA GTCCTCCACA CTCGTTCCCC ATTGGCAAAGA TACATGGAGA GCACCCTGAG	360
GACCTTTAAA AGGCAAAGCC GCAAGGCAGA AGGAGGCTGG GTCCCTGAAT CACCGACGCT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

GAATTCGGCC TTCATGGCCT AATTAGATTA TTTGAGCTT GGGAACACTT GTACATGGTT	60
CCCCGGGACA TAAATGTAGA AGTTCGTAG AGCAGTATCT TCACATTGAG GGATGTGAAG	120
GCTTTGCACA GTATAGATAG TTTAATGTAA TTTAGAGTTC TTCATTATCT TTCCTAGGAT	180
CAGATATCTG CCGATGATGA CTTCTAACCC ATTCAGAATC TTTCTATGGT ATATTGCCCT	240
GGGGTGTAAG ATCCTCCAGG ACCCTAAACA GATGGACAGT TGATGCATT CAGGGTAAGC	300
TGTAGACAAAC AATATATTTG ACCCTGAAA CAATTCAGTA TGCTTGTCAT TTGTAACTA	360
GAGTTATTTT AAACATAATT TTGAATAAAA AATAAATTTT AATAAATACA TGTTCCCAAT	420
TATGCATATA AAAGCAATCC TCGAG	445

(2) INFORMATION FOR SEQ ID NO:351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

AATTCGGTTC ATGGCCTAAT TTTGGAACTA AGAGACAGAT TTTTGTGTTT TGTTTTTTTA	60
AATAGCTGTT AACTAGTCTC ATAAGGACAA AATACAGAAA GACAGTTCTT ACAGAGAAAT	120
AGAAGCAAAA AAAGGAACCA ATGGAAAATT TAAACTGAA AAATAGAATA TCTGAAATAA	180
AAAATTCACT AGATGACATA ACTGTTGAGG AAAGAGTATG TGAATTTGAA GAAAGAGCAA	240
TAGAAATGTT CCATTGTAAA GAACAAAGAG AACTCGAG	278

(2) INFORMATION FOR SEQ ID NO:352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

GAATTCGCCT TCATGGCCTA CAGATTATCT TACACTGAAC TGATCAAGTA CTTTGAAAAT	60
GACTTCGAAA TTTATCTTGG TGTCCTTCAT ACTTGCTGCA CTGAGTCTTT CAACCACCTT	120

TTCTCTCCAA	CCAGACCAGC	AAAAGGTTCT	ACTAGTTTCT	TTTGATGGAT	TCCGTTGGGA	180
TTACTTATAT	AAAGTTCCAA	CGCCCCATT	TCATTATATT	ATGAAATATG	GTGTTACAGT	240
GAAGCAAGTT	ACTAATGTTT	TTATTACAAA	AACCTACCCT	AACCATTATA	CTTTGGTAAC	300
TGGCCTCTTT	GCAGAGAATC	ATGGGATTGT	TGCAAATGAT	ATGTTTGATC	CTATTCGGAA	360
CAAATCTTTT	TCCTTGGATC	ACATGAATAT	TTATGATTCC	AAGTTTGGG	AAGAAGCGAC	420
ACCAATATGG	ATCACAAACC	AGATGGCAGG	ACTCGAG			457

(2) INFORMATION FOR SEQ ID NO:353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

GAATTCGGCC	TTATGGCCTA	GCAGGCGCC	AGGTAACATG	AACAAACAGC	TGCTTGCTGC	60
CCCCAAGCTT	TAGTTTCTAG	TGGGCCTGGT	GCAATTGTGA	AGGACAACTC	CACCCAAGGC	120
CCAGTATTGA	AGAGGGGTAG	GGTGGGAGG	TTGTACATAT	CGCGAACGCT	TGGCAAATCT	180
CTAGATTTTT	TTTCCTCCTA	GGAAATAATA	ATTTTAAAAA	AGGCTTGTA	AAAATAATAA	240
AATGTTTCAT	GACAGCAGCA	GATGTAAAC	TCCAGTACT	CCGGGCGACC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

GCCTAGACAT	GATGGTGGCC	ACGTGCCAGG	GGACCACACC	CTATGTACAA	AGCAGGAGAA	60
TGATGCTCCC	AGCTGAGCTG	CAGGATGGGC	GCTGGGCTGA	CTGGAGGGGT	AGACGGGGTG	120
GGGTCTGACC	CCATTAGCCT	TTCCCCATCC	AACCTGGGCC	CCCATAAGCC	ATTCTCTGGC	180
CCTCTGCACA	AGACAGACTC	AGCAAATCTG	CGAGGTATGG	GGATTCTGCC	AACTCCCCAC	240
CTCGCCTCAC	CTTCCCTAGG	TCTGCGCGTT	AGGAGATTCT	GGAGCCAGAG	GGAGAGACCC	300
CAGAACTCC	CCGGTCGGCG	ACCCAGCCCG	AGACGCCTGG	GGTCCCAAGG	GAAGCTGAAC	360
GCCCGCAGAA	TGGGGAAATG	GAGAGAGAAC	CTGAAAGAGC	CCCTGTAAC	CGAG	414

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

GAATTCGGCC	ATCATGGCCT	ACTCCCGAGT	AGCTGGGACT	ACAGGCATGT	GCCACCACGC	60
CCAGCTAATT	TTTTGTATTT	TTTTTAGTAG	AGATGGGGTT	CCACCATGTT	AGCTAGGATG	120

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ATTTCGATTT CCTGACCTTG TGATCCGCCC GCCTCGGCCT CCCAAAATGC TGGGATTATA      180
GGTGTGAGCC ACCACGTGGC CTCATTTTCAT TCTTTTCATGT GGATAGGCAG TTGTTCCAGA      240
AGTATATAGT GAGGAGCTTC TTCTTTCTCT AATGATCTGC AATGTCACCT TCATCATTTTA      300
TGAAGGTTGC ACATATACAT GGGAAATTTT TAGTCTGGCA TTAAATGTTT TCACAAAAGAG      360
TTCCTGCAAA CGTTTTTGTT TTTATTTCTT ACTGTTCCCT TCACGTACTC TCTACTGAAC      420
TAAACTCTCT AATGTGTCTC GAG                                     443

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(2) INFORMATION FOR SEQ ID NO:356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTC AAGAGCAGCC CACCTGTTC GTATTCATAC      60
CCACATATCC ATAATAGAGC TCTTCTCTTC CCCCAGGTTT CTCTGCCTCA GCCTTTTCCT      120
CTTAGCAGAT GCCATCTGCA GGGCCACTTG GCTGCCCCGTA GCAGTAACC CACAGTCTTC      180
CACATTACT CCCTCAGCCT CAGCTGCTCC TGCAGCCCAG GCACTGTCTC TGTCTCTGCA      240
TTGCTCAAGC CTCCACCATC TCGTTTACAC CCCACAGCCA CTCGAG                          286

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(2) INFORMATION FOR SEQ ID NO:357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```

GAATTCGGCC TTCATGGCCT ACTGCCTTAG CCTCCCAAAG TGCTGGGATT ACAGGCGTGA      60
GCCACCATGC CCAGCCCTAT AGTAGTTCTT CTTTGGCCCC TTAATATCCT CACCCACATG      120
TCCTGTACCC TGCCTGAACC CTCCTCCTCT TTTTGTCTTG ATCTTTGAGC TCCCTAGAGC      180
CCATAATTCT TTAGAGCAGG TATGTCCCGA GTCTGAAACA TGCCCTTATT TGTCCCAAGC      240
TCTGGACATT TCTCACCCCA TCTCTCGAG                          269

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(2) INFORMATION FOR SEQ ID NO:358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```

GAATTCGGCC TTCATGGCCT ACCAAGGAAG CTTTCTGTGT TTTGGCCCAA GGAGCGTCAA      60
TAAGATCTTT GAAAATACTT TGAAGTCATT TTGTGTGTGT GTATGTGCAT ACACACCTGA      120
TTTGTTTTAT TTTTATTTT TATTTTTTGA GTTAGGGTCT GGCTCTGTCTG TCCAGGCTAG      180
AGTGCAGTGG TGTGGTCTCA GCTCACTGCA ACCTCTGCCT CCCAGGCTCA AGCCGCCCCC      240

```

CCACCTCGAG

250

(2) INFORMATION FOR SEQ ID NO:359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

GAATTCGGCC	TTCATGGCCT	AATGGGAGAT	TGGTGGGAGT	AGGGAACACA	AAAGGCATGG	60
GAAAAGAAGA	TAGGTTGTAT	TTTGGTCATA	CTGACACCAA	CATGCCTAAA	GGATAGCCCT	120
GTGAAAAAAG	CTAGCAGACA	GTTGAACTGC	GGCTGTGAAA	CAGGAAGCCG	TGAGGGCTAG	180
ACTCATCGTT	GTAGTCATTC	GTAAGAGTA	AATACTTGA	GCTATTGTAG	TAGATGGTAT	240
CACCACGGAA	CACTCGAG					258

(2) INFORMATION FOR SEQ ID NO:360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

GAATTCGGCC	TTCATGGCCT	AGGAAGCCAC	AGGTCGGCTC	TGCATTAGCA	GGAGCAGCCG	60
CCCTCGCTGG	CCGGGGGCTC	CTGGGGTTTG	TCCAGCTTGA	TGTCGATCAT	CCCTTCTTTG	120
CTTTTCTCCT	GGACATTCTC	CATTCCGGGT	AGAGCCGACG	CCACACGTCG	AAAAAGCTGC	180
TTCACGTGTG	AGCCAGTCTT	CGCACTGGTC	TCAATGAACA	TGACGCTCAG	TTCTTTGGCG	240
CGCTGCCCCC	CCCCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

GAATTCGGCC	TTCATGGCCT	AAAGATTAGC	CTGGGTAACA	TAGTGAGACC	CTGTCTCTAT	60
TAAAAAATAA	TAATAAAAAA	AACATTACAC	TTGGTATTGT	TCACTAAGGT	ATTGGTTGTT	120
AAGGCATTCA	TTAAGGTATT	GTTAAAACTT	TGTGTAAGCA	TGTTAAAGTC	TCAGTAACTT	180
TGGGATAGAA	ATAAAATGTG	ATAAAAAGCT	GAAAGAAACC	ACCACAAGGG	AGAGTCCTTT	240
TTGAAATATT	AGAGACATAA	TGCTGTCTAA	TAAAAAACGA	CATCAAAGAA	AAACTACACT	300
ACAGTGACTG	CAGACTTAAT	GTTGGCCAAC	CATGCATCCT	CCCTAGAAAT	GCATTTGAAT	360
TTGATTTACT	AATCTTTTAT	TTAGGAAATT	TACATTTTAA	CATTAGTGAG	ATTGGCCTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

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GAATTCGGCC TTCATGGCCT AGTTATTCTT CTAATAGCTC AGCTACTTTT CCTTAAATA      60
TCTTTTCTC  TGCAAAGCCT TCATATAATT GTTGTTATTA TAACAGTGAT GATGACTGCC      120
ACTCATTACA ACTGCTGTG TTAATCTTTG TTGTTATTTT AAACCATATG TTATTTAAAC      180
CATAACTGC  ATCATAAAG CAGTTTCTT CTAATCCATG ATGACACCTG CTAGCCAGGT      240
ATCGTATCAA TTCTTCACAG GTCTATTGAA TTCTAGACCT GCCTCGAG      288

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(2) INFORMATION FOR SEQ ID NO:363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

AAAAATTTCA ACAAATCCTG AAGTCTTTCT GTGAAGTGAC CAGTTCTGAA CTTTGAAGAT      60
AAATAATTGC TGTAATTCC TTTGATTTT CTTTTCCAG GTTCATGGTC CTTGGTAATT      120
TCATTCATGG AAAAAAATCT TATTATAATA ACAACAAAGA TTTGTATATT TTTGACTTTA      180
TATTTCTGA  GCTCTCCTGA CTTTGTGAAA AAGGGTGATG AAAATGCATT CCGAATCTGT      240
GAGGGCCCAA AACAGAGACT CGAG      264

```

(2) INFORMATION FOR SEQ ID NO:364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT AGACCCTCAT CAATAGATGG AGACATACAG AAATAGTCAA      60
ACCACATCTA CAAAATGCCA GTATCAGGCG GCGGCTTCGA AGCCAAAGTG ATGTTTGGAT      120
GTAAAGTGAA ATATTAGTTG GCGGATGAAG CAGATAGTGA GGAAAGTTGA GCCAATAATG      180
ACGTGAAGTC CGTGGAAGCC TGTGGCTACA AAAATGTTG AGCCGTAGAT GCCGTCGGAA      240
ATGGTGAAGG GAGACTCGAG      260

```

(2) INFORMATION FOR SEQ ID NO:365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

GCGCCTATCA	CAAGCAGATC	ATGGGTCGCT	TCAAGGAGAC	GAAGGAGGCT	GAAGATGGCT	60
TCCGCAAGGC	CCAGAAGCCT	TGGGCCAAGA	AGATGAAGGA	GCTGGAGGCA	GCCAAGAAGG	120
CCTACCATTT	GGCTTGCAAA	GAGGAAAAGC	TGGCCATGAC	ACGGGAGATG	AACAGCAAGA	180
CGGAGCAATC	GGTCACACCT	GAGCAGCAAA	AGAAGCTGCA	GGACAAAGTG	GACAAGTGCA	240
AGCAGGATGT	GCAGAAGACA	CAGGAGAAGT	ATGAGAAAGT	GCTGGAAGAT	GTGGGCAAGA	300
CCACACCCCA	GTACATGGAG	AACAAACTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

GAATTAACAG	AGTTTTTCAGA	ATTAGAATAC	TCAGAAATGG	GATCATCGTT	CAGTGTCTCT	60
CCAAAAGCAG	AATCTGCCGT	AATAGTAGCA	AATCCTAGGG	AAGAAATAAT	CGTGAAAAAT	120
AAAGATGAAG	AAGAGAAGTT	AGTTAGTAAT	AACATCCTTC	ATAATCAACA	AGAGTTACCT	180
ACAGCTCTTA	CTAAATTGGT	TAAAGAGGTT	GAAGTTGTGT	CTTCAGAAAA	AGCAAAAGAC	240
AGTTTTTAATG	AAAAGAGAGT	TGCAGTGGAA	GCTCCTATGA	GGGAGGAATA	TGCAGACTTC	300
AAACCATTTG	AGCGAGTATG	GGATCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 200 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTAC	GGAGCGAAAC	TCTGTCTCAA	AAAAAAAAAA	60
AAAAAAAAAA	ACCGAGTATA	AAAGGCATT	TTTTCTTTA	AACTAGTAA	AATATAATGT	120
TGAATAGTTC	TATTTTGCTT	AACGGGCTTT	TGTTATTTGT	TTTGTGTAGA	AATTGGCATT	180
TTTCACATAG	AAATCTCGAG					200

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

GAATTCGGCC	TTCATGGCCT	AGAGAAATGA	GGAAAAAGAA	GGAAGAATAT	TTAACTTTTA	60
GTCCTCTTAC	AGTTGTAATA	TTTGTGGTCA	TCTGCTGTGT	TATGATGGTC	TTACTTTATT	120
TCTTCTACAA	ATGGTTGGTT	TATGTTATGA	TAGCAATTTT	CTGCATAGCA	TCAGCAATGA	180
GTCTGTACAA	CTGTCTTGCT	GCACTAATTC	ATAAGATACC	ATATGGACAA	TGCACGATTG	240
CATGTCGTGG	CAAAAACATG	GAAGTGAGAC	TTATTTTCT	CTCTGGACTG	TGCATAGCAG	300
TAGCTGTTGT	TTGGGCTGTG	TTTCGAAATG	AAGACAGGTG	GGCTTGATT	TTACAGGATA	360
TTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

GAATTCGGCC	TTCATGGCCT	ACATTCGGAG	AAGTTGAAAG	AATTACACCC	AGAACACCCA	60
TGTCTACCAT	GTTACTACAT	TTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GCGTGTGCAA	120
TTTTAATTAC	AATGGTCGAG	GAAGCTCTTG	CTGAGAAGGT	GATGTTGAAT	AAAGACTCTA	180
AAGACCCTAA	AGAGTTGAGA	GAGAGCTGTG	TGGAGTTCG	GGGCCCAGGC	ACAGCAAGTA	240
CAAAGATCCT	GAAGCAGGAG	CATTCTTGGT	GTGTTCAAGG	AAAGCAGGAC	AACCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

GAATTCGGCC	TTCATGGCCT	ACCGCCTTTC	CATTATGCAA	CTGTGGTGGC	TTTTCTTTTG	60
TTATACGACG	ATTATTTGTC	AACCCCACTA	TCTTTGCACT	CAACCATGGG	CCCCCTGGGC	120
TCAGAGACCT	CGTGACAGTC	ATCTTCTCAT	CACCACATCT	GCAAATGTGT	GGGTGGATGG	180
GGCAGCAACA	GTCCACCTCC	TCCAAGAAGC	AGTCCCTGAT	TTTCCTCCC	CAGACAAATC	240
TTCTGCTCTC	TGTTCTTGGA	AACTCAAAGA	ACTAAGCACC	TCCCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

AATTCGGCCT	TCATGGCCTA	CAAGCTCGAT	CATTATCCTT	CTGTGAGTTA	CCATCTGCCA	60
AGTTCATCCG	ACACCCTCTT	CAATTCTCCC	AAGTCGCTCT	TTCTGGGAAA	AGTTATAGAA	120
ACAGGGAAAA	TTGACCAAGA	GATTCACAAA	TACAACACCC	CAGGATTAC	TGGTTGCCTC	180
TCCAGAGTCC	AGTTCAACCA	GATCGCCCTT	CTCAAGGCCG	CCTTGAGGCA	GACAAACGCC	240
TCGGCTCACG	TCCACATCCA	GGGCGAGCTG	GTGGAGTCCA	ACTGCGGGGC	CTCGCCGCTG	300
ACCCTCTCCC	CCATGTCGTC	CGCCACCGAC	CCCTGGCACC	TGGATCACCT	GGATTACGCC	360
AGTGCGGATT	TTCCATATAA	TCCAGGACAA	GGCCAAGCTA	TAAGAAATGG	AGTCAACAGA	420
AACTCGGCTA	TCATTGGAGG	CGTCATTGCT	GTGGTGATTT	TCACCATCCT	GTGCACCCTG	480
GTCTTCCTGA	TCCGGTACAT	GTTCCGCCAC	AAGGGCACCT	ACCATACCAA	CGTTCTCGAG	540

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

TCGACCCCTG	GCTAATGACA	AACTATGTGA	CCTTCATGGT	GGGGGAGATT	CTGCTCCTCA	60
TCCTGACCAT	CTGCTCCCTG	GCTGCCATCT	TTCCTCCGAG	CTTCTCTAAG	AAGCTTGTGG	120
CCTTCTCAAC	TTGGATTGAC	CGGACCCGCT	GGGCCAGGAA	CACCTGGGCC	ATGCTCGCCA	180
TCTTCATCCT	GGTGATGGCA	AATGTCGTGG	ACATGCTCAG	CTGTCTCCAG	TACTACACGG	240
GACCCAGCAA	TGCAACGGCA	GGGATGGAAA	CGGAGGGCAG	CTGCCTGGAG	AACCCCAAGT	300
ATTACAACTA	TGTGGCCGTG	CTGTCCCTCA	TCGCCACCAT	CATGCTGGTG	CAGGTCAGCC	360
ACATGGTGAA	GCTCACGCTC	ATGCTGCTCG	TCGCAGGCGC	CGTGGCCACC	ATCAACCTCT	420
ATGCCTGGCG	TCCCGTCTTT	GATGAATACG	ACCACAAGCG	TTTTCGGGAG	CACGACTTAC	480
CTATGGTGGC	CTTAGAGCAG	ATGCAAGGAT	TCAACCCAGG	GCTCGAG		527

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

GGCAAGAAAG	GATGTCCGCA	CAGCTGGCTG	CTGCTGAGAG	CAGACAAAAG	AAGCTGGAAA	60
TGGAGAAGCT	TCAGCTACAA	GCCCTTGAGC	AAGAGCACAA	GAAGCTGGCT	GCCCGCCTTG	120
AGGAAGAGCG	TGGCAAGAAC	AAGCAGGTGG	TCCTGATGCT	GGTCAAAGAG	TGCAAGCAGC	180
TCTCAGGCAA	AGTCATAGAG	GAGGCCCAGA	AGCTCGAAGA	CGTAATGGCC	AAACTGGAAG	240
AGGAAAAGAA	AAAGACGAAT	GAATTAGAAG	AGGAACTCTC	CGCTGAGAAA	CGAAGAAGCA	300
CAGAAATGGA	AGCTCAGATG	GAAAAACAAC	TCTCTGAGTT	TGACACTGAG	CGGGAACAGC	360
TTCGTGCCAA	GCTGAACCGG	GAAGAAGCAC	ACACCACAAA	CCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

GAATTCGGCC	TTCATGGCCT	ACTCTGTTTT	CTCCCTGGAC	TTATGTGCTT	CGTCTGGAAT	60
GTTACATCTC	TTCCTCTCTT	TCTTTTTTTT	TGGTCCCAT	GTTGACTGTT	TTATTGGGGT	120
TTCTGGATAT	CTCGGGGCCA	CCTCACAGGA	AGCGGTTTGC	AATGAGATCA	TAAACATTGC	180
CGAAAAATCT	GTTCACTACT	GCAGCACTGT	TTCTCATCCC	CTTGACTTTC	ATCACAAGGT	240
ATCCCTTCT	GACAATAAAT	CATCTTTAAT	CATTTCTCAG	CAACCTCAAG	CCCAGCAGCG	300
AAGAGTCACC	CCCTATCTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

GAATTCGGCC	AAAGAGGCCT	ACCTAAACCG	TCGATTGAAT	TCTAGACCTG	CCCCAAAACC	60
AACAAGGAGA	ACAAGCTCAG	TCTTCTGTGT	CTTAATTTT	GGCTTTACTC	TTAGCCCTGC	120
CCCATTTCCT	AGGCTCTCCA	CAGTCCAGCC	GCTTTGAGCT	ACTTTTCCTT	CCCTGATATG	180
TGCAGCTCTC	TCACCTCTGA	GCCTCCGCAC	CTGCTGTTCC	ACAGCACTCT	CCGCATTGCC	240
TTCTCCCACT	GTGGCTCACT	GCTGAGCTGT	GTTCAGGCCC	TTTGGGAAAC	CCTCTCTTTC	300
ACTCCTTTTC	CCTGGTCTGG	CTTGGGAGCC	CATGCTTACC	CCTGTCAGGA	CACCTTGAAA	360
CCCAGCAGTG	AAAACATGAC	ACTTCCTTGT	CTGGCTGATT	TTCTTAGTGA	AGCGAGTAGG	420
AGTTTCCTTT	GTCAGGACTT	CAGCAAGCAA	AATTCAGGAG	AGGTCATAAA	ATGTCTCGAG	480

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

GAATTCTAGA	CCTGCCTCGA	GTAACCAGAG	AGTCTTGTCA	ACATTAACAC	TAGCAGTATT	60
TCCAACACTT	TATTTTITTA	ACTTCTTTTA	TTATACAGAA	GCAGGATCTA	TGTTTTTTAC	120
TCTTTTTGCG	TATTTGATGT	GTCTTTATGG	AAATCATAAA	ACTTCAGCCT	TCCTTGGATT	180
TTGTGGCTTC	ATGTTTCGGC	AAACAAATAT	CATCTGGGCT	GTCTTCTGTG	CAGGAAATGT	240
CATTGCACAA	AAGTTAACGG	AGGCTTGGGA	AACTGAGCTC	GAG		283

(2) INFORMATION FOR SEQ ID NO:377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

GAATTCGGCC	TTCATGGCCT	AAACAGCAAA	GAACAACTCA	TCACCGCTCA	CGTTCAGTAT	60
CTCCTCATCG	CGGCAATGAT	CAGGGAAAGC	CGCGTTCACG	TTTACCAAAT	GTGCCATTAC	120
AGAGGAGTTT	AGATGAAATT	CATCCAACAA	GAAGGTCACG	TTCTCCAACC	AGACACCATG	180
ATGCCTCCCG	AAGTCCAGTT	GATCATAGAA	CCAGAGATGT	GGATAGTCAG	TATTTATCAG	240
AACAAGACAG	TGAGCTTCTT	ATGCTGCCCA	GAGCAAAACG	AGGACGAAGT	GCAGAATGCC	300
TACATACTAC	CAGAATGTCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

GAATTCGGCC	TTCATGGCCT	ACTGAAATTT	CAATAAAACC	AGCTTGAAAG	TTCCATTACT	60
AGAAAGATAA	GAGTGGTCAG	AAAACATTTT	TTATTAACCT	ATTTTCATCTA	GTAAGAGTAT	120
CTTAAATGTT	TTTTCTCTTG	AGTACTGAAT	ACACATGCAG	GACAATGGAC	CTAAATACAG	180
TTAACTTTTG	TTTTTCACTC	CTTTGCTTTT	GCATTGTCAA	TAGTCCGGTA	AGGTTTtaggt	240
TCTATCAGAA	GTA CT CAGAC	ATGCAGTGGG	CAATCGATAA	TTTCTACCTG	GGCCCTGGAT	300
GCTTGACAA	CTGCAGGGGC	CATGGAGATT	GCTTAAGGGA	ACAGTACTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:379:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

GAATTCGGCC	TTCATGGCCT	AGTCTGTGTG	TAGTGGAAC	TCTATTGCCT	GCCCTGCACA	60
TCTGCTCCTT	TTCTTCTCTG	CACTCTGGGA	CAGCTTCTAA	AGTTTGTCCA	ACATGTCATT	120
GACTGAGTTT	TGTATCATT	CAGTTCTGCT	CTTTACTGGT	TCCTATGTGG	ATGCTAATTA	180
TGCAAATGCA	TTTTCCACCT	CTTGCACTCC	TTTTTCTAAG	TCACCTCACT	TCTCATTTC	240
TCATGTTTTT	CCNTTATCCT	CTTCTCTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

GAATTCGGCC	TTCATGGCCT	AACGCGGCCA	GGCGATTTCGG	TGAAGCGATT	CCTGCAGGCG	60
TTGGTTCCCC	TCTTTGACCT	GGTACAAAGA	ATTTTACGTG	AAAGATTTTG	TCGTCAGAGT	120
CCACATAGTA	ACCTATTTTG	AGTGCAAGTA	CAATACAAAC	ACTTAAGTGA	GCTGCTGAAA	180
AGAACTGCTC	TCCATGGAGA	GAGTAACCTC	GTCTTATTA	TCGGACCCCG	AGGATCAGGA	240
AAAACATATG	TAATAAATCA	TGCTTTGAAA	GAACCTCATGG	AAATAGAAGA	AGTGAGTGAA	300
AATGTATTAC	AAGTTCACCT	AAATGGACTG	CTGCAGATCA	ATGACAAAAT	CGCCCTAAAG	360
GAAGTCTCGA	G					371

(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

GCAGAGTTA	GCAAATTAAT	TATAGCTATC	TTTAAGCTAT	AAATGTGTTA	ACATGTATAT	60
ATACCATTA	TTATGTTCTA	CTTTAGTGAT	ATACCTTAAT	TTAGTGGGCT	TTGGCAGGGC	120
GGGGGAGGGG	GAACGTTTCA	TAATCTCTGA	GGAAAACAAA	ACCTGTTTTT	TACTTGAGTC	180
TAACATATGG	TCCCAATTTA	TTAATACTTC	TGTTAAATTT	GATGTCAGGT	CAACATTTTT	240
CAGAAATGTA	TTTATTCTCA	GAAACAGAAC	ACTCGAG			277

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

GAATTCGGCC	TTCATGGCCT	AGTTGTTACT	GGAGTTAAAG	AGAGAACTGA	GAAAGACAAA	60
GGAGTAGAAC	GTTTACTCAA	ATAAGTAATA	ACAGAAAAC	TTCCAAACCA	GAATATACAG	120
GTACAGGAAG	GTCAAGGGTC	ACCAATCCGA	GTAACTCAG	ACAAGAATAC	TCCAATTTAC	180
AAACTCATAA	GGGTCAAAGA	CAAAGAGAGA	ATTAGAAAA	CAGCAGGAGA	ATAGAAGCAA	240
ATAACATATA	AGATAGATCC	AATATGCTTG	GTAGCAGATT	TCTCAGCAGG		290

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

GAGAGTGTGG	AGAGGGTACA	TTTCCCTTGT	ATNCTATGTT	CTTCTTTCTA	GTGGGTCTCA	60
TGTAGAGATA	GAGATATTTT	TTTGTTTTGT	AGATTCCAAA	GTATATATTT	TTAGTGTAAG	120
AAATGTACCC	TCTCCACACT	CCATGATGTA	AATAGAACCA	GGAATAAATG	TGTCNTTGTG	180

ATAATCCCAT AGCAATTAT GGTAAGAACA AGACCCCTTT CCCTCACCAC CGAGTCTCGA 240
G 241

(2) INFORMATION FOR SEQ ID NO:384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

GAATTCGGCC TTCATGGCCT AGAAACACAA TAAAGCCCCA CAACAGCAAA CTTTTTAAAC 60
GACGAAAGAG AGCTCTAAAT AACAGCAAAA TGCTGCTCTT CTTGCTCCCA TTATGTTTAC 120
TATTACTGTG CTCTAGTGAG AATAGCAAGG GGTCAAAGGA ATTTATAACA CTTCCCTATAC 180
CTTCAACTTA CCAAGTCCCC TACCAAGTAA CAGTTTTCTG TCAGAGAGAA AGTTCTGCCC 240
TCCCTGCTCA AAGGTGTCCA TGCCAATA ACTTCCCCTG TAGCTACCTG GGTCTCGAG 299

(2) INFORMATION FOR SEQ ID NO:385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

GAATTCGGCC TTCATGGCCT AGAAAGAGGT GGCAGAAGGA ATGGTAGGAA GGGGAGGATG 60
TAAGCGATAT CATCAAGTCA GAATCATGAG TTCTTGGTGC CCGGATGTTA GAGGAGGGAA 120
AAGGTGAAGA TGGCTGAAGC TGTACACTTT CATGATGGTG GAATGGAGGG GTCCCTTGGG 180
AATTAGGGGT GTCTCTAGGA AGAACCAGCT TAGGGTACAT TGAGAAAGAG GAGACAGGCT 240
AGGCAGGTCT AGAATTCAAT CGCAGATCAC AGCTACAAGG ACCAGGCCTT TGATACTCTG 300
AGCCTCGATA GCTCTGATAG CATGGAGACC AGCATCTCTG CTTGCTCACC AGACAACATC 360
TCTAGTGCCA GCACTTCAAA TATTGCTAGA ATAGAAGAAA TGGAGAGACT TTTGAAGCAG 420
GCTCATGCAG AAAAGACGCG GCTGCTCGAA TCCAGGGAAC GGGAAATGGA AGCCAAAAAA 480
CGAGCCCTGG AAGAAGAAAA ACGACGCCGG GAAATCCTGG AAAAACGATT ACAGGGATAG 540
CTCGAG 546

(2) INFORMATION FOR SEQ ID NO:386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GTTAGGATCA TACATCATAG GTGTATGTTT AACTGTTCAA GAAACTGCCA AACTGTTTCC 60
CAAAGTGGTT GTATTGTTT ACATTCCAC GAGCAGTGTT TGAGAGCTCC AGTTCTTGCA 120
CATCCTAGCC AAAAAAGGT TCTGTTTTT AAAGACAATT TTTTTTTCT TTGAGAGTTT 180

CGCCCTAGTC GCCCAGGCTG GAGTGCAGTG GTAAGCGAAT CCCTGCTACA GGCCAGAGAC	240
TGTTCTCAGT TGTTTTTAC ACCAAGTATC GCACTTCATT CTAACACTCC ACCATTTTAC	300
AAATGAGATT TCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

GAATTCGGCC TTCATGGCCT AGGTCAGGTT AGTCAGCTAA TGGATAAGAG ACTTGAAATT	60
ACTCTTTTGG GATTAGCAAA TAGAAGGGAA AAACATGATA AGGGCACAGA GCGGTGGGTC	120
TGGGGGAAAA AGCAGAGGCA CAGTTTGAAA AAAATGTGTA AGAGACTGAC TAGGTAAGAT	180
ATGGTCACAG TTCATAAGTC CTTGAATTC TAGGATTAAA AAGGTGAACT CGAG	234

(2) INFORMATION FOR SEQ ID NO:388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

GAATTCGGCC TTCATGGCCT ACTAGATAAG TGTCAATTCC ATCTGCTTCT GATTTCCCAC	60
GTCAGTCCCC TGGTCCACAC ACTGTGATCT TCTGCCCCCA TCTGAGTGCC GCATACTCAG	120
CCTGTGCCCT GCATCAGACC CCGGCCCAGC ACAGTAACGA GAATGGGCTT CCTAAACACA	180
AATCTGATTT GTTCCGCCTT CCACTTCCTA GTGGCTTCAT TCTCGTGCCC TCACTCAGGG	240
CCCTCACACA TGCTGTTCCG TGCACCTCCG ACACCTTCC CAGCGCCCCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

GAATTCGGCC TTCATGGCCT AAGCAAAGCT AAGTGTAATA CTAAAAGCA GTTTGTTGCA	60
ACTGGTCATA AAAGTGATTA AATCTAAAGC TGGCATTAAAT AAGGAAGCAA GGTAATAAAA	120
CAAAAATATA AACAGCTTTG AGAAAGTACA CCTAATAACA AAATCTTGTA ACACAACAAA	180
TGAAAATCAC AAAAAATATA AGGAGACTCC TCGAG	215

(2) INFORMATION FOR SEQ ID NO:390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```

GAATTCGGCC TTCATGGCCT AGAAAAACAC TATAGTCACG CAAGTAATGA CCCTTCTTAT      60
CCTCAACCCC CAGCATATAT GCACAAGGAC AAACAGTATA CATACAATCT CACCTGAGAG      120
ACGTCCTCAG ACTTGTGTG AAACCTTATC ATGCTGCATT ATCTCCCTTA CAACATCCTT      180
CCTGCCTTGT TTCTCATTTT CACACTATAC GGAGTAAAAA AATATACAAT TTCTATATAT      240
TATATATATA ACCTCCATAT ATTTTATACT ATTTTCATATT TTTATACTAT CAGATTAATG      300
TTTTATATTT TATCTATCAT TTTAAATATG CTATGTAAAG CATCTACAAA ATTGGTCACC      360
ATTCTATGG GAAGTATCTG CAGAACTCTA GAAATGAATT CATCTTTTGC TTACCCCTCC      420
CTTTTTGAGG GGACAGGGAC TTTCTTCTTT TCCCTCATCT TCATCTTCCC CCTCGAG      477

```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```

GAATTCGGCC TTCATGGCCT AGTTAGTCAG AGTGAAATAT TCAATAATGA GTGGTGCAGC      60
CTTGGGACTT GAGATTGTTT TTGTCTTTT TCTGGCATT TTTCTGCTTC ATCGATATGG      120
AGACTTTAAG AAACAGCATA GACTTGTGAT TATTGGAACA CTGCTTGCTT GGTATCTCTG      180
CTTCTTATT GTCTTCATAC TGCCTCTGGA TGTTAGTACG ACAATATACA ACCGGTGCAA      240
GCTCGAG                                         247

```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```

GAATTCGGCC AAAGAGGCCT AGTCATCTGC ATTTATTATG AGCAGCAGGT GGGACACTTC      60
CAGCAACAGT AAAAAAAGT AATTTACAAA AGCAGGTTTC AGTGAAGCCA TCTGGTTGTT      120
ACCTTTGGGT GCTCACACGT AGATGCCAAC CCAGAGCAGC AGGAAGAGGA CTCCAAAGCC      180
CATGAAGAGT GAGGCCACTA AGGAGATGAG GAGCTCTTTA TAGATATCAC GAGTGTACTT      240
GGTAGAGGTG ACCTCGTAAA CGAAGAACCA GGCGGTGAAG AACATGCCAA TGGCCAAAAG      300
CACCACGGTC AGATGGGGGA AGACAGCTGG GTTCACTGGG CTGGTATATC TGCTCATGGC      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

GAATTCGGCC AAAGAGGCCT ACCCTGGGTT AACATTCAAG ATGGTACATG CTGAAGCCTT	60
TTCTCGTCCT TTGAGTCGGA ATGAAGTTGT TGGTTTAAAT TTCCGTTTGA CAATATTTGG	120
TGCAGTGACA TACTTTACTA TCAAATGGAT GGTAGATGCA ATTGATCCAA CCAGAAAGCA	180
AAAAGTAGAA GCTCAAAAAC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

GAATTCTAGA CCTGCCTCGA GCCGGAGATG GANAAGAAAG TCAGCCTACT CAAGGACAAT	60
AGCTCTCTGG AATTTGACTC TGAGATGGTG GAGATGGCTC AGAAGTTGGG AGCTGCTCTC	120
CAGGTTGGGG AGGCACTGGT CTGGACCAAA CCAGTTAAAG ATCCCAAATC AAAGCACCAG	180
ACCACTTCAA CCAGCAAACC TGCCAGTTTC CAGCAGCCTC TGGGCTCTAA TCAAGCTCTA	240
GGACAGGCAA TGTCTTCAGC AGCTGCATAC AGGACGCTCC CCTCAGGTGC TGGAGGAACA	300
TCCAGTTCA CAAAGCCCCC ATCTCTTCCT CTGGAGCCAG AGCCTGCGGT GGAATCAAGT	360
CCAAGTAAA CATCAGAACT TCTCGAG	387

(2) INFORMATION FOR SEQ ID NO:395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

GAATTCGGCC AAAGAGGCCT ATCGAGAAGC CTTGTTTATT TAATGTGAGT TTGTGCCTTT	60
TTGTCTCAAT CTTCCAATAC AGGTATATTG AGAAAAAAG CAGTCTAATA AAATCCTAGA	120
CAGAACTTTC TGGAGTCCAG TTGGTGATG TCCATTTTCC AGCTGTATGT ATCCTCAAAC	180
TTGCACTGAT AACCGCCATT TTACCAGGGC AGGATTAGGA AGAGGTACAA AGGTGTGTCT	240
GAAAATTTTT GCACGTGGAT TTCTGCATAT AATAGTCCCG TGTCAGTTTA CTTATGCAAA	300
CATTGCACAT CTGAATTGTA ATTCGGCCGT TTCTACTGA CAGGATGTCC TTTTGCTTTT	360
GTCTGCCTCC TCTTCACATC TTCTCTTTA TCCACCCTGC AGCCGGGGGG CGGGGGAGAC	420
CGGATCCCAG GCAGGACAGT GGCTAGGCTG CGTGCCCCA CCCCCGACCC TCGTTTGACC	480
CCTGGGAGCC GGGGCGAAGA CAGCACAAGG ACGGAGCCCT CGGATCCCTC ACGAGTGGGG	540
CAGAGGCTGC GGG	553

(2) INFORMATION FOR SEQ ID NO:396:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 472 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

```
GAATTCGGCC AAAGAGGCCT ACAAGGTTAC TTGACCAAGA TGGTGACATT GTAAGATTGT 60
AACAAAGGAA ATGTGACTTC AGAGTCATGG TTGTTAACTA TGCTATGAAG TAGGAAAAC 120
TTATGAGGTC TTTTAACTC AAACAGTCGA GTTTAAAGT GAGGGTTAGC AATGATGAAT 180
GAGTGGCCAA AAAATGTATT CATATTTTTA GTCTTTCTTA GAATTACTGG TAGTTGTGCA 240
CAACTAGAGG GTATTTATTT GTGTGTGTAT GTGTCGTGTG TGTACGAGTG CTGGAAATAC 300
TCTGCCAGTT TACAGTAGAG GCAGGCTTAC ATAATTCAGT CATGAAAGCT GAGGCTTATA 360
GTTTAGAGGG GATCGTCCCTC TTCTTAATGA GTCTGTAAGT TACAAAATA ACTTTTTTCT 420
TTATTTACTA ACTGGTTGGT TTTTAATATT AAAATATTAG GTGCTTCTCG AG 472
```

(2) INFORMATION FOR SEQ ID NO:397:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 548 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

```
GAATTCGGCC AAAGAGGCCT AGATTGGGGG ACATTCTTCT TTAGAAGGAA AAGAGTCTAA 60
TTAGTGGATA TTAAGTAATT AAATAATACA TACTATCAAA TATTATGAGA GTCACATGAA 120
CCATGAAGTC TTCACTTAAT TTAGGAGAAA TGGGGAATAT TTCTATCAT TCCTGATAAC 180
AGAACTAGAT ATTTCAAGAT CATAGTCATG GAATGTAATC CATAATACCA AACAGGGTGC 240
TTTACTTTGA AGCCATTGAC CATTAAATTT GATTGTTAGT AGCACAGGCT ACCAAAAAAT 300
AGCAAGGAAT ATGGTATCCA CACAGATCTC GGCTGGCCTC AAGTAATCAA AAGTGAGAAT 360
GAAACATACA TGACACAACCT GGGGACCTCT GGGTTTCTGA GACGTGGGCT ACAAGATTAT 420
ATTAGGTAGA AAATAAAGG AAATGTATTC CAAGCAAAAG TGGCAAGGGA ATTTCACAGA 480
ACTAATTTT TAAGGGAGGT AATAAAAGCA GCAGTTAAAA TGCATGTCCA TGTATCAGAT 540
TCCTGGAG 548
```

(2) INFORMATION FOR SEQ ID NO:398:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

```
GAATTCGGCC AAAGAGGCCT AGGCTAAATA CCGGCACGAG ACCGATTTTC TGAAGACAGC 60
AGATTTATCA CTGTTAATCC AGCGGAAAAA AACACCTCTG GAATGATAAG CCGCCCTGCT 120
CCAGGGAGGA TGGAGTGGAT CATCCCTCTG ATTGTGGTAT CAGCCTTGAC CTTCTGTGTC 180
CTCATCCACT TCTCAAACCTC GGAGAACTGC AAGGAGCTGC AGCTGGAGAA GCACAAGGGC 240
GAGATCCTGG GCGTGGTGGT GGTGGAGTCG GGCTGGGGCT CCATCCTGCC CACGGTGATC 300
```

```

CTGGCCAACA TGATGAATGG CGGCCCGGCT GCGCGCTCGG GGAAGCTGAG CATCGGGGAC      360
CAGATCATGT CCATCAATGG CACCAGCCTG GTGGGGCTGC CCCTCGCCAC CTGCCAAGGC      420
ATCATCAAGG GCCTGAAGAA CCAGACACAG GTAAAGCTCG AG                          462

```

(2) INFORMATION FOR SEQ ID NO:399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

```

GAATTCGGCC AAAGAGGCCT AGGCCGGGCA CACAGAAAAA TGCGAGGAAT AGAAATGCTT      60
GCATACTCTT GATTTTTTTT TTTTTTTTGT GTGTAAAAAA CACACCCTCC CCTCCCACCC      120
CAAAAAACAT CAAATTCCTT CCTTTTCCCC AAATCCCTGG ATCTTGGAAT GAAAGCCACC      180
CTTCCCCAAT CTGTCCTCAC CTCCTTCAGC CCATCCAAGT TATGCACAAA AAAACAAAAA      240
TTAGTGAGAA ATTTGGGGAT TTGCACAACA AAAAATTAGA TAATGTTTTT CAAAACTAGG      300
TCTTCTATGC TGTGTCAAAA AAAGTTTCC TACAGACTGAG GATATTCACA CGACAGGAGC      360
CTGGGGGTTA AATGAGCCTT TATTAGAATG TTGTAGCAGT TGTGTTTGAA GGCGGTGGCC      420
CTACAAAA

```

(2) INFORMATION FOR SEQ ID NO:400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

```

GAATTCGGCC TTCATGGCCT AAGTTGAAAC TTACGAGTAA CATACCTGGT GTCTGATTGG      60
TTGTCATACT TTTCATTTTC CCTCCTTTCA GATCCAATCC ATTCTACACA TTATACTGAT      120
TTTTCTCTAG TGTACTGATT TCTGTTATGT CACTTTGCTG CTTAGGCTTC TTAATGCTTA      180
CTGTATCAGG TGTAACACC TTTTGCTTAC CTTTCAGGC CTTTTTAGAG TCTTATATAG      240
CTTACTCCCA TGCTCCAACCT CCCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

```

GAATTCGGCC TTCATGGCCT AGGCACTTTG AAGAGATATA GAACTCCGTG TATCACATT      60
TCCATTTTTA TTTCAATTTT TAATGCCCCA GAGCCTAATT TCTGTGGGCC TCTGCTGATT      120
TGCACATTG AGATTCGTGT GTAAATATGC GTGTGGCATG TGTACACGCC TGGGCCTCCT      180
TATCACAAAG TGTGCTCTCT CAGTGTTTAA ATACACACAA TCCACATCGA CTCGAG      236

```


(2) INFORMATION FOR SEQ ID NO:402:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

```

GAATTACCTT ATACACATAG CCTGAAGGTA ATTTTATACA ATATTTCCAA TAGTTTTGTG      60
CTTCAAACAA AGTTTGGGTA CATTGAACCA TCAGAAAGGA AAGGTGTCAT TGTCTCAGCC      120
ACCCATGTGG ACAATCTCTG GTTGTGTTGGC ATCACTGTTG TTGCTGAGTC TGAATGTGAG      180
GAACATGCCA TTGGCATGTC TTGCCACAC ACACACCATT TTGTTATCTT TTGTGGGTGT      240
GCTTATGTGG GGAATCTGG GCGTGTGTGA AAAAAATATA TTGCAGCTCG AG                292

```

(2) INFORMATION FOR SEQ ID NO:403:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

```

GAATTCGGCC TTCATGGCCT ACTTGGGGTA CTGAGATACA TGGGGCCGAA AAGGGGTAAT      60
ATGGCCATCT TTTATCAGAA AAAGTGACAA AACGGGAATT TAAAAAATGA ATTTTCCATC      120
TGACTTTATT TCCAAATACA CTTTCTTTT TAAAAAACCA ATACACTTTC TTTGAGGATG      180
ACAGTATTAG GAAATCCAAT TATACAAAAA ATACTACATC TAGTCTGGGG TAGATATATT      240
TATTTTGGT AACATACATT AAGTGGCACT AATTACACAG TAACTATAAG GTAACATAA      300
TGAAACCACA GAACTGTAAC TCTGCCACAG CTGCATGAAC TCGAG                345

```

(2) INFORMATION FOR SEQ ID NO:404:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 252 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

```

GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAGCCATTAA TCTAATTAAT TGTTTAATCC      60
TGCTTACAAG ATTATCTTGA AAAAATGTGC TGGGGAGTAT GGTATAATGA ATTACGGGTC      120
CAAGAATTG GGTTCAGATA CCACCTTCAG TCTTACTAA GCTGCGTGAC TTTAGCAAAG      180
TGCTTAGTCT CTCTAAGCTT CGGTTTCCTA ATCTATGAGG AGGGCCTAAG ATATCACCAC      240
CCATCACTCG AG                252

```

(2) INFORMATION FOR SEQ ID NO:405:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

GAATTCGGCC TTCATGGCCT AAGAATACGA AATTTGAGAG GATGAATTTG ACCTTTAATA	60
TTGTTGGACT TTGTATTGGA TATCTTTCCT CCATCACTTC AAAATCGTCT TGCTTGGCCT	120
CTTATTGCAA CCACAGCTGC AGTAGACAGT TCCATACAAG CTTCCAAGAA CTTCATGGGT	180
ACATCTGGAG AGCACCTCAC CTGGGGCCAC ATTCTCTACC TTTCTGTCT TACTCTTCCT	240
CCTCTGGGCT TCTTCTGGT GCATGGGGT GGGGGGAGAT ATTAAGTATT CCCCAACAGC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:406:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

GAATTCGGCC TTCATGGCCT ACACAGCAAC AACCAACATA GCTAATACAG AAAGCAGTCA	60
GCAGACTCTA CAGAATCCC AGTTCTTTT AACAAAGTTG AATGATCCTA AAATGTCTGA	120
AACGGAGCGC CAGTCCATGG AAAGCGAGCG TGCAGACCGC AGCCTGTTT TCCAAGAGCT	180
CCTTCTGTCC ACTTTAGTGC GTGAAGAGAG CTCATCCTCA GATGAGGATG ATCGGGGGGA	240
GTTTCTCGAG	250

(2) INFORMATION FOR SEQ ID NO:407:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 481 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

GAATTCGGCC TTCATGGCCT AAAAGAACT AGGTGTGATT GGAAGGAAGA ATCATGAAAG	60
ATCAGGCTAG ATACTGGTGG GGCAGCTATT AAAGGAGTTT GAGCAGGGGC ATGACATCTT	120
CACATTGAAA GCAATATGGG AGTCGAATTA AATTTAGTAC CCAGTTGAGA TAAAAGTCCA	180
TTGCCATATT CACAGTGAGG TGGGACAAAA GCAGAGTCAG AGAGATTAAG AGGCTGGGAA	240
AGATTGAAGT GATTTTTAGG AATCAGAATC CACATCAGTT GATGACAAGT ACAGAAGGGC	300
ACAATAGCAA GAAGAAGAAG TAAATGATAA TTCCTAGATG CCATTAGTCA CAATCAAGTA	360
CGGAAGAGAC ATTATTGACT GAGGTTGAAT CAGGGCAGAG AAGATAATAT ACCTGATTTT	420
GGAAGTGTTG CATGTAAGGG GGCTTCGATT TCAGCTACTT ACATACTTGG GAAGTCTCGA	480
G	481

(2) INFORMATION FOR SEQ ID NO:408:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

GAATTCGGCT	TCATGGCCTA	CCCGGCAATT	GGCTGATCCG	CAGAAACATT	TCTGGGCTTC	60
TTTTCATAT	CTCTGGAAC	GATAGTCAAA	CGTTAACTCT	GAGCCTGAAG	GAACCACTTT	120
GGTGGTAAAA	AACCCAACCC	TCAGTTGTCC	GTTACAGTC	CATTTTGGG	TTTCACAATT	180
TGGTTCACAG	CTGTGATTCA	TGAAACGAGA	GCAATTTCT	TTTTGAGTGG	CATCTATTAT	240
CTCATCATTC	TTCAGGGCCA	TGAAATAGTA	ATGGATGTTT	TTGTTTCGTG	CATACTCCTT	300
CACTCGAG						308

(2) INFORMATION FOR SEQ ID NO:409:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 337 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

GAATTCGGCC	TTCATGGCCT	ACAATGAGGA	TAATACAAA	GAGCAATCTG	CCCCACTGTG	60
AGCCTGAGCT	TCCCATCTG	ACTTCTCTCT	CTCCAGAGGG	ATCCACTCCT	ACCAGTCTGG	120
AAAGCACTGG	GCATACAAGC	GCACAAATGC	GTGGCACATA	CTACAAATCC	TTCTAAAGCC	180
ACTGCTGTAC	ACCTGCCTCA	CTTAACCATG	CAGCCTCAAG	GCTGTCTCAT	GTCATTCTTT	240
CCTACAGCTG	CAGAGTTTTC	AACATATGGA	CAGGTGTGCC	AGGATTTATT	TGACTAGTCT	300
CTTACTGATC	TAGCTCACCT	CCTAAATACA	ACTCGAG			337

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 315 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

GAATTCGGCC	TTCATGGCCT	AAAATGTGGG	GATTGGGAAC	CACTAGTTCT	TTCAGATGGT	60
ATTCTTCAGA	CTATAGAAGG	AGCTTCCAGT	TGAATTCACC	AGTGGACAAA	ATGAGGAAAA	120
CAGGTGAACA	AGCTTTTTCT	GTATTTACAT	ACAAAGTCAG	ATCAGTTATG	GGACAATAGT	180
ATTGAATAGA	TTTCAGCTTT	ATGCTGGAGT	AAGTGGCATG	TGAGCAAAC	GTGTTGGCGT	240
GGGGGTGGAG	GGGTGAGGTG	GGCGCTAAGC	CTTTTTTTAA	GATTTTTCAG	GTACCCCTCA	300
CTAAAGGCAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 277 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

GAATTCGGCC	TTCATGGCCT	ACCTGAACCC	CTTACTTCGA	AGGATCATAA	GATTCACAGG	60
GGTGTTTGCA	TTTGGACTTT	TTGCTACTGA	CATTTTGTGA	AACGCCGGAC	AAGTGGTCAC	120
TGGGCACTTA	ACGCCATACT	TCCTGACTGT	GTGCAAGCCA	AACTACACCA	GTGCAGACTG	180
CCAAGCGCAC	CACCAGTTTA	TAAACAATGG	GAACATTTGT	ACTGGGGACC	TGGAAGTGAT	240
AGAAAAGGCT	CGGAGATCCT	TTCCCTCCAA	ACTCGAG			277

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

GAATTCGGCC	TCATGGCCTA	GTGGTAGGGC	TGAATTCGCA	CTATAGGGTT	AGATTTTCTA	60
CTGTAGGGTT	AGATTTTTTT	AATGGTGTGT	ATATAATAAT	ATAATATTAA	TAATAATCGG	120
AGAGGGTCAA	AGAGGAGGGA	AACTGGGTAA	CCCAAAAACA	TAAGGTTCGAG	GTCCCTGTTC	180
TTCAACCGAA	AGAGGGTCAA	GGACCAAAGC	CATAGATTTG	ACTGGTAGTT	TAGTTTAGTC	240
CTGTCTACGA	AGAAGAAGAG	CGGTTGTTTG	TTTTAACAGA	TTCAAGAGCA	GGAAGCACTC	300
ATTTAGATAA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

GAATTCCTAGA	CCTGCCTCGA	GTGAGGCTTT	TAAAAACAAT	CTCATCTGTC	CCTCTAAAAA	60
TTAGCTTCCT	TTAGAACCTC	TTCTCCTTGG	CAATATATTA	GTGATACTAT	TGTTATCTTC	120
ACACTAAAGA	TTCAAACTT	TAGTTTTTGT	TTTAGGAAAG	TTTTTTATTT	TTACATTCTC	180
TTCATCCTTC	ATAATTACCC	AGTCATCATG	AACTTTGTAG	TTATCTATTT	CTTCATAGGA	240
ATCCTCGAG						249

(2) INFORMATION FOR SEQ ID NO:414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

GAATTGATAC	TAGGGACCGA	AGGGAAGTAA	GAGACTCCAG	AGACATGCCG	GACTCAAGGG	60
AGATGAGAGA	TTATAGCAGA	GATACCAAAG	AGAGCCGTGA	TCCCAGAGAT	TCTCGGTCCA	120
CTCGTGATGC	CCATGACTAC	AGGGACCGTG	AAGGTCGAGA	TACTCATCGA	AAGGAGGATA	180
CATATCCAGA	AGAATCCCGG	AGTTATGGCC	GAAACCATT	GAGAGAAGAA	AGTTCTCGTA	240
CGGAAATAAG	GAATGAGTCC	AGAAATGAGT	CTCGAAGTGA	AATTAGAAAT	GACCGAATGG	300
CCCGAAGTAG	GGGAGGGTT	CCTGAGTTAC	CTGAAAAGGG	TAGGCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

GAATTCGGCC	TTCATGGCGT	TAAACTGTG	CCTAACAGAG	GTGTCCTCTG	ACTTTTCTTC	60
TGCAAGCTCC	ATGTTTTCAC	ATCTTCCCTT	TGACTGTGTC	CTGCTGCTGC	TGCTGCTACT	120
ACTTACAAGG	TCCTCAGAAG	TGGAATACAG	AGCGGAGGTC	GGTCAGAATG	CCTATCTGCC	180
CTGCTTCTAC	ACCCAGCCCG	CCCCAGGGAA	CCTCGTGCCC	GTCTGCTGGG	GCAAAGGAGC	240
CTGTCCTGTG	TTTGAATGTG	GCAACGTGGT	GCTCAGGACT	GATGAAAGGG	ATGTGAATTA	300
TTGGACATCC	AGATACTGGC	TAAATGGGGA	TTTCCGCAA	GGAGATGTGT	CCCTGACCAT	360
AGAGAATGTG	ACTCTAGCAG	ACAGTGGGAT	CTACTGCTGC	CGGATCCAAA	TCCCAGGCAT	420
AATGAATGAT	GAAAAATTTA	ACCTGAAGTT	GGTCATCAAA	CCAGCCAAGG	TCACCCCTGC	480
ACCGACTCTG	CAGAGAGACT	TCACTGCAGC	CTTCCAAGG	ATGCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

GAATTCGGCC	TTCATGGCCT	ACTGAGCCTA	GTAATTCAAG	GCTGCAGTGA	GCTGCCATCA	60
CATCACTGCA	TTCCCGCCTG	GGCAACAGAA	GTAGACTCCA	TCTCTAAAAA	GAAGGAAAGA	120
AAAAAAGGAA	GAAATATACA	GTAATTTTAA	ACTGGGAGAT	GAAATGCTAA	TTTCTAGAAG	180
TCCATTTGGT	TTTGAAGGGT	CTCATGTCAA	AAAAAAAAAA	AAGTAAGTAA	AATAAGACCC	240
ATCCTACTGT	TTATATACT	AAAATAGTAA	GTTAATTAAA	TGAAAATGAA	GTACATTTGG	300
GCTTTCATTT	ACCAATCCTG	GAATGTTGAA	AAGTTGCCCA	AAAGACATTT	AGCAAGACTC	360
GAG						363

(2) INFORMATION FOR SEQ ID NO:417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

```
GAATTCGGCC TTCATGGCCT ACCTGAAAGC CCATCTCCTC CAACTTGCAG CGCCGGTAGA      60
GCTCGTAGTG CCGGCTGTGG GTCTGCTCGC GGAGGTCTTC CATGTTCAAC CGGATCAACC      120
TGCCTCGAG                                     129
```

(2) INFORMATION FOR SEQ ID NO:418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

```
GAATTCGGCC TTCATGGCCT AGGAGGTGGG TATAGGGAAC ACTTGGGGAC AAATAGTGAA      60
ATCTGAATAT AGACTGTGCA TTGTATCATT TAGTATAAAT GTTGACTTGC CTGATTTTGT      120
TGTGAAGGC ACTGTGGTTA CACAAGAGAA CGTCTGTCTT CCTAAGTGAT GCATGCCAAG      180
GTTTGCAGGG GCATCCTGTC TGCAATTACT CTCAAATAGA TCAAAATAAT AATAACGTGT      240
TGTCGCATGA TGGAGACAGG GAAGAAGAAA GGAAGGGCT CGAG                                     284
```

(2) INFORMATION FOR SEQ ID NO:419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

```
GCCAGCACAT TGTGGAACAG AAAAATGGCA AAGAAAGAGT GCCCATCCTC TGGCATTTC      60
TGCAGAAGGA AGCAGAGCTG AGGCTGGTAA AGTTCCTGCC TGAGATTTTG GCCTTGCAAA      120
GGGATCTAGT GAAGCAGTTC CAGAACGTCC AGCAAGTTGA ATACAGCTCC ATCAGAGGCT      180
TCCTCAGCAA GCACAGCTCA GATGGGTTGA GGCAGCTGCT TCACAACAGG ATCAGCTCT      240
TTCTGTCCAC ATGGAACAAA CTGAGGAGAT CGCTTGAGAC GAACAGCTCG AG                                     292
```

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

```
GGAACCAACA GAACAACCTG TGAGGAAGAA CAAAATGGCC TCTAATATCT TTGGGACACC      60
TGAAGAAAAT CAAGCTTCTT GGGCCAAGTC AGCAGGTGCC AAGTCTAGTG GTGGCAGGGA      120
```

AGACTTGGAG TCATCTGGAC TGCAGAGAAG GAACTCCTCT GAAGCAAGCT CCGGAGACTT	180
CTTAGATCTG AAGGGAGAAG GTGATATTCA TGAAAATGTG GACACAGACT TGCCAGGCAG	240
CCTGGGGCAG AGTGAAGAGA AGCCCGTGCC TGCTGCGCCT GTGCCAGCC CGGTGGCGCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

TAATTTAGAT TATACAGAAC TTGGCCTGCA GAACTGAAG GAGTCTGGAA AGCAGCACGG	60
CTTTGCCCTCT TTCTCTGATT ATTATTATAA GTGGTCCTCG GCGGATTCCT GTAACATGAG	120
TGGATTGATT ACCATCGTGG TACTCCTTGG GATCGCCTTT GTAGTCTATA AGCTGTTCTT	180
GAGTGACGGG CAGTATTCTC CTCCACCGTA CTCTGAGTAT CCTCCATTTT CCCACCGTTA	240
CCAGAGACAA CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

GCGATTGAAA TGGATCCTCC AGCTCTTCCA CCAAAGCCAC CTAAGCCAAT GACTTCAGCA	60
GTTCCAAATG GAATGAAGGA CAGTTCTGTT TCTCTTCAGG ATGCAGAATG GTACTGGGGG	120
GATATTTCAA GGGAGGAGGT AAATGACAAA TTGCGGGATA TGCCAGATGG GACCTTCTTG	180
GTCCGAGATG CCTCAACAAA AATGCAGAGA CTCGAG	216

(2) INFORMATION FOR SEQ ID NO:423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

GAATTCGGCC TTCATGGCCT AAAATTAATG AGTTGAACCT GTGACCACTG CATTCAAGAA	60
GAGTCACCCA AGAGAGAGGT GGGGAGTCGA ACAGAGCTCC TTTACTTTCT CCCACAGAGG	120
AAAAGGTGGA ATTCTGGGCT GGCTTTCCCT CACCAGAGGG TATCCCAAAT CTATGACAAA	180
AGAAAAATGC CAGTCTCTTT TGGAAAGTAG GGAATGCCCT AGTGATGCTG TATGAAGAAG	240
CAAGCCTCCA TCTTCCCCGG GGAAATTTGA AACCAAGATG GGGTCCTGTC AATGACCCCTC	300
TAGCATTTAT TGAGTGCCCTA TTAGACAGGT GGCCTTGGGC TTTGAAATGC AATATCTTAT	360
TTAACTTAAT TCTGAGAACG TATCTCGAG	389

(2) INFORMATION FOR SEQ ID NO:424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

```

GCCCCGTGCTG ATGTCTTTGA AAGAAGGCTA TAAGAAGTCC TCAAAAATGG TATTTAAGGC      60
TCCCATCAAA GAAAAGAAGA GTGTTGTGGT CAACGGAATA GATTTATTAG AAAATGTCCC      120
ACCCAGGACA GAGAATGAGC TCCTTCGAAT GTTCTTCCGG CAGCAGGATG AGATTGACG      180
GTTGAAAGAG GAGCTGGCCC AGAAGGACAT CCGCATTCCG CAGCTCCAGC TGGAACTGAA      240
AAACTTGCGC AACAGCCCCA AGAACTGTTA GCTCCCCAGC TGGGCTGTTT TCTAAGCCGA      300
TCTCTCCGTC GTTCTACTC ATCCCTTAAC TTCTCCCTTA CCAGTGACCC CAGAGACAGA      360
GCCAGGACAG GAGTGGGGGC CAGCCTGAGG ACCCCCGCCT ACCACCTCGA G      411

```

(2) INFORMATION FOR SEQ ID NO:425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

```

GGTACCAACA GGACACCCCG GTGGCCCCC GCTTTGACGT CAATGCCCCG GACCTCTACA      60
TTCCAGCAAT GGCTTTCATC ACCTACGTTT TGGTGGCTGG TCTTGCGCTG GGGACCCAGG      120
ATAGGTTCTC CCCAGACCTC CTGGGGCTGC AAGCGAGCTC AGCCCTGGCC TGGCTGACCC      180
TGGAGGTGCT GGCCATCCTG CTCAGCCTCT ATCTGGTCAC TGTCACACC GACCTCACCA      240
CCATCGACCT GGTGGCCTTC TTGGGCTACA AATATGTCCG GATGATTGGC GGGGTCCTCA      300
TGGGCCTGCT CTTGCGGAAG ATTGGCTACT ACCTGGTGCT GGGCTGGTGC TCGCTGGCCA      360
TCTTTGTGTT CATGATCCGG ACGCTGCGGC TGAAGATCTT GGCAGACGCA GCAGCTGAGG      420
GGGTCCCGGT GCGTGGGGCC CGGAACCAGC TGCGCATGTA CCTGACCATG GCGGTGGCGG      480
CGGCGCAGCC TATGCTCATG TACTGGCTCA CTTCCACCT GGTGCGGTGA GCGCGCCCGC      540
TGAACCTCCC GCTGCTGCTG CTGCTGCTGG GGGCCACTGT GGCCGCCGAA CTNATCTCCT      600
GCCTGCAGGC CCCAAGGTCC ACCCTGTCTG GCCACAGGCA CCGCCTCCAT CCCATGTCCC      660
GCCCAGCCCC GCCCCCAACC CAAGGCTCGA G      691

```

(2) INFORMATION FOR SEQ ID NO:426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GCAGACCATA TATCGAAAGT TCTTTACTTG TATCAAGGTG AGAAAAAATT AGAAGAGATA      60
TTACCTCTGG GACCAAACAA AGCTCTTTTT TATAAAGGAA TGGCATCATA TCTTTTACCA      120

```


GGACAAAAAT CTCCATGGTT TTTCCAAAAA CCCAAAGGTG TAATAACTTT GGACAAACAA	180
GTAATATCCA CGAGTTCAGA CGCCGAATCC AGGGAAGAAG TTCCCATGTG TTCAGATGCT	240
GAATCCAGGC AAGAAGTTCC CATGTGTACA GGCCCTGAAT CCAGGCGAGA AGTTCCTCGT	300
TATACAGATT CTGAACTCGA G	321

(2) INFORMATION FOR SEQ ID NO:427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

GAATTCGGCC TTCATGGCCT ATATACTATC AAATGAAAAT AGCAAGATGC TACCATTAT	60
ATTAATAAGA GGACAAAATA TTAATATATT CATGGTTGCT TGTCTATGTG GAATATTTCT	120
GGATATATAC ATAAGAAGTT ACATTGGTTA CCTATGGGCA GGTTACTACT GGGTGGCAGG	180
TGGGCTCGAC	190

(2) INFORMATION FOR SEQ ID NO:428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

GAATTCGGCC TTCATGGCCT AGGCAAAGCT GGCCCTGACG CCTGGGTTTC TTGGCCCCAG	60
CTGCCCAGCA GGTGCCTCGA TTCCCTGCCC TTGTGACCTC CCAGGAAACA GAACTGATCT	120
GGGACACTAT GTCACCTCTC CTCTCATCTG GGGTCAGTCA GGGTTCGGGG GCTGCAGCAG	180
CCAAGCGCAT GAGAGGTGTT TCCTTGGCCT TCCAGAAGGC CCACTGTGGA GCCAGCCTCC	240
CTATGGGAGG CAGAGCGGCA AGGACAGGGC TTTGGAATCA GCCAGGTCGG CTCCTGGGCT	300
GTGGCCGTGG AGAAACACTG CCCCCAGGAT GACACAGGCA AGAGCCCCTG AGGCATGGGA	360
GGCCCAGGGA AGACCATGGG CTGTAGGGGA GAGTGTGGCA GGTGACCCAA AGGCCCAAAG	420
AGGGCCGTGG GGCCTGAGGA GGTCATAATC TCTTCTGAGT GGGGGCAGGT CGATTCTTGC	480
ACAAGGTGGG CTCTTCACTG AGCCATAAGG GACAGGGAGG TATGGGAGAG CGCTGGGGGC	540
CCATCCCCCT GTCCACCCAG TGTCCTCTGG CCTGTCTCTC AGGGAGCAGA GCAGAGCAGG	600
TGGTGGACGG GCCCAGTGCT GGGTGTCTTC ACCACCATCC CCCCATCCCC CATCTAAGTC	660
GCTCCTCGAG	670

(2) INFORMATION FOR SEQ ID NO:429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

GTAAGGATTG	GCGATTCCCTA	CAGCGAATGA	TCACCGCTCC	CTGCATCCTC	TTCCTGTTTT	60
ATGGCTGGCC	TGGTTTGTTT	CTGGAGTCCG	CACGGTGGCT	GATAGTGAAG	CGGCAGATTG	120
AGGAGGCTCA	GTCTGTGCTG	AGGATCCTGG	CTGAGCGAAA	CCGGCCCCAT	GGGCAGATGC	180
TGGGGGAGGA	GGCCCAGGAG	GCCCTGCAGG	ACCTGGAGAA	TACCTGCCCT	CTCCCTGCAA	240
CATCCTCCTT	TTCCTTTGCT	TCCCTCCCCA	ACCTCGAG			278

(2) INFORMATION FOR SEQ ID NO:430:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCTGTTCATC	TTTAAATGCT	60
GTTTCTCTG	TTCAAAATGC	CCTTTCCTAC	TTTATCTACT	TGTGCCACTG	CATATTCCTA	120
AGGCTCAACT	CAGGGTATCT	TCCCTCGGAA	TCCTTGTCTG	ATCATCCTGG	CCCCTCTGGC	180
GGACAGTAAT	TTCTGCCTCT	GTGCTCCCAT	TACCTGAGCA	CACCTGTATG	GTGCTGCTGA	240
CCCCGCTGAA	TTGGCATTAT	GGGCACGTGC	GTCTCTCTCA	TTCCATGGAG	CTCCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:431:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

GTTACATGAC	ACTGTTAATG	ATTGCATTTC	GCTTGCTGTG	GGGGCATCTC	TTGCGGATCA	60
AACCCACGCA	GAGCGTCTTC	ATTTCCACGT	GTCTGTCTCT	GTCAAGCACA	CCCCTCGTGT	120
CCAGGTTTCT	CATGGGCAGT	GCTCGGGGTG	ACAAAGAAGG	CGACATTGAC	TACAGCACCG	180
TGCTCCTCGG	CATGCTGGTG	ACGCAGGACG	TGCAGCTCGG	GCTCTTCATG	GCCGTCATGC	240
CGACTCTCAT	ACAGGCGGGC	GCCAGTGCAT	CTTCTAGCAT	TGTCGTGGAA	GTTCTCCGAA	300
TCCTGGTTTT	GATTGGTCAG	ATTCTTTTTT	CCTAGCGGC	GGCTCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:432:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

GAATTCGGCC	TTCATGGCCT	ACCAGGTTCT	TGCTGCCCTG	CGACTCCAGT	ATCTGCAGGG	60
GGATTATACT	CTGCACGCTG	CCATCCCACC	TCTCGAAGAG	GTTTATTCCC	TGCAGAGACT	120
CAAGGCCCCG	ATCAGCCAGT	CAACCAAAAC	CTTCACCCCT	TGTGAACGGC	TGGAGAAGAG	180
GCGGACGAGC	TTCCTAGAGG	GGACCCTGAG	GCGGAGCTTC	CGGACAGGAT	CCGTGGTCCG	240

GCAGAAGGTC GAGGAGGAGC AGATGCTGGA CATGTGGATT AAGGAAGAAG TCTCCTCTGC 300
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:433:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

GAATTCGGCC TCATGGCCTA CTCCTCAGCC CCTCATCTTG CCTCCACCCA GCTGCTCCAT 60
 TTTTGCCACA TCGTGCCCG CAGCCCCAGA GTCACGTGCC ATGTCACCAT CTCCTCCTC 120
 CTTTGGAATC CTCTCCGCAC ACTGTGGCCC TTGTCTCAGG GCCACAAGC TGAAGTGTGG 180
 CATAGCTCTC TCTTCTTCTC CAAGAAGACT CAGCAGCCTA CATTCCCAT TGTGGTATGT 240
 GCCATTGGGT TGGATGTCCC CACTTATCTC GAG 273

(2) INFORMATION FOR SEQ ID NO:434:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 324 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

CGAGTGAGCG GCGGGACAG TGCTTGTGAA ACTGAACACA ACAAAGTAT GGATATGGGA 60
 AACCAACATC CTTCTATTAG TAGGCTTCAG GAAATCCAAA AGGAAGTAAA AAGTGTAGAA 120
 CAGCAAGTTA TCGGCTTCAG TGGTCTGTCA GATGACAAGA ATTACAAGAA ACTGGAGAGG 180
 ATTCTAACAA AACAGCTTTT TGAATAGAC TCTGTAGATA CTGAAGGAAA AGGAGATATT 240
 CAGCAAGCTA GGAAGCGGGC AGCACAGGAG ACAGAACGTC TTCTCAAAGA GTTGGAGCAG 300
 AATGCAAACT ACCCACACCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:435:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 548 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

GAATTCGGCC TTCATGGCCT AAATGATCAA ATTTTGGCTT ACATATTTTG CAACAGTGGT 60
 ATAACACAAA GAAGTAAGCA AATATGGCAG AAGTGTGGTG GCTTTGGCGT CTACTTTTGA 120
 CCATAGTGGT GGCCCTGTTA TTCGTGGCTC CCGGGGTTC TACACATCCT TCCCGATGGA 180
 AGAAGGGGTT GGCCAAAAAG GTCAGCCAGC TGATGGGTTG GACCAAGAAA GACAGAGTGA 240
 TAAGAATGAG TGACACCATG TTCTATCATT TTGTATTAGA TGCACCAAAA AACTATTCTG 300
 TTATTGTGAT GCTTACTGCT GCTCTCCAG CGTTCAGTTC ATGTGTCATG TGCAAAGGTG 360
 CTGCTGAAGA ATTTGAGATC TTGGCAAATT CCTATCAACG CCCTGGTGCA TTCACCACAA 420

AGGTATTTT TGCAATGGTG GATTATGATG AAAGCCCTGA GGTCTTTGAA GCGCTCCAGG 480
 TAACGTCACT TCCGAGTTTC TTCCACTTTT CTGCCCAATG GAAATTTACA ACAGATGACA 540
 GTCTCGAG 548

(2) INFORMATION FOR SEQ ID NO:436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GAATTCGGCC TTCATGCGCT AAAATGAAAT TCAGACAAAA TCACTGGCAC CAAAAATGGT 60
 TTATTCTGAG CTGTCTTCAC TTGACTATT TGGGGGGCTT CTCTCAAGTA CAGATGTGGG 120
 TTGGGGTCCC CTGGAGCAGG CAGGATTGGC AGTAAGAGAT ATTGGCCACT CAAGTCTACT 180
 GTGTGTGTGT GCCTCTGGAA GAGTGAAGAA TGGACTTCAA AAGTAACATC AAAAATCTAA 240
 CTGCCACCAT CCTGGAGACA TTTGCAGGG CTTTCCTTC AAGTCTTTCA AGTACAGGAC 300
 ATCTCGAG 308

(2) INFORMATION FOR SEQ ID NO:437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

GAACAGAAGA GATCCCCTCG GCCCCACGC CATATGACCA AAGTCACACC AGGTTGAGAG 60
 CTGCCCCACTC CCAATGGAAAC CACCTTATCA TCTAACCTCA CTGGTGGCAT GCCCTTCATT 120
 GATGTGCCCA CTCCCATCTC CTCTGCAAGT TCAGAAGCTG CCTCAGCAGT GGTCAGTCCC 180
 TCTACAGACA GTGGCCTGGA ATTCTCCTCC CAAACCACTT CCAAGGAAGA CCTACTGAT 240
 CTAGAGCAAC CTGGCTCTCC AGGGTACAGC ACAGCTACAG AGCCTGGAAG CAGTGAGCTA 300
 GGTGTTCCCG AGCAGCCTGA CTTCCAGGAA GGGACCCATG TGGAAAAGTC CCACTCAGCA 360
 TCTGTGGAGT CCATCCCTGA AGTGTTAGAG GAGTGACAGT CCCCTGCCGA CCAACTCGAG 420

(2) INFORMATION FOR SEQ ID NO:438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCT TCTCACTGCA CCTGGATGGC 60
 AACGTGCTGG ACCACTTCTC GGAGCTGCGC AGCGTCGAGG GGCTGCAGGA GGGCTCTGTG 120
 CTGCGTGTGG TGAAGAGCC GTACACGGTG CGTGAGGCC GCATCCACGT GCGCCATGTC 180
 CGAGACCTGC TCAAGAGCCT GGACCCATCC GATGCCTTCA ACGGGGTTGA CTGCAACTCC 240

TTGTCCTTCC TGAGTGTCTT CACCGACGGC GACCTCGAG

279

(2) INFORMATION FOR SEQ ID NO:439:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 351 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCA CCCAGCCTTC TTCTTTTCAT      60
TATAACCTTT ATACCACAGT AAGCTGTTGC ATCATTCAAA TGACTCTGCA TCCTATATTG      120
AATATTCTCC ATTATTCTCT AATATCTTGG GGGGTACCCA GGATTACAGG GTTCTGGGCA      180
TACATGTTAA TGCTTTTGCC AGGACTTTTC TTTTATTCA TTGTCGTGAC CCATTGTCTT      240
TGCTTATATT TAAAGTTTTT GCTCTTGATA TCATTGGTTC TTTCTAAGT CACTTTTCTT      300
GGTAACTGCT TTGAATGAA TCATACATAT CTCACTTACG GAGCTCTCGA G              351

```

(2) INFORMATION FOR SEQ ID NO:440:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 412 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

```

GAATTCGGCC TTCATGGCCT ACCAATACTC ATAATTAAAA GTTTTCGTT GTCAAAACAT      60
TTTCACAGTT CAGGAATCAC AGTCCTATTT CATCTTTTGA AATAAAAGTT AAAGTCCATT      120
TTTCTTAAGC CTTATTATAC CATTATCCAA AAACACTACC TAGCATTGAT CTTAGTTTCT      180
CATATCTCCT TAGCAGATAG TTTAGTATAT TCCATTTGTC TTATTTGAGG TTTAAAAAAA      240
GTTGTGGAAG AAGTTTCTCA GGAGTTCAGC AAGCCTTTCC ATCTATCTTC TATTTTAAAA      300
GAATGTGATT TATTGTTTTT ATGAATAAAA TATACCTCGT GTGTTTCTCA TATGATGTTT      360
CATTACATTA ATCATCCATT AAGTAAATGT TTTTGTGCTG CAAAAACTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:441:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

```

GAATTCGGCC TTCATGCCTA GCCAGGAGGA GGAGGACCCT ATGAACAAAC TCAAGGGCCA      60
GAAGATCGTG TCCTGCCGCA TCTGCAAGGG CGACCACTGG ACCACCGCT GCCCTACAA      120
GGATACGCTG GGGCCCATGC AGAAGGAGCT GCGCGAGCAG CTGGGCCTGT CTACTGGCGA      180
GAAGGAGAAG CTGCCGGGAG AGCTAGAGCC GGTGCAGGCC ACGCAGAACA AGACAGGGAA      240
GTATGTGCCG CCGAGCCTGC GCGACGGGGC CAGCCGCCCG GGGGAACCTG AG              292

```

(2) INFORMATION FOR SEQ ID NO:442:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 222 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

```
GAATTCGGCC TTCATGGCCT ACCGCCTCGC TGCCTGGACA CCTGTCCGTG CCACCCTGGT      60
CACTGAGCAG GACATCCGCG TCTGTGCCCC CTGGGACCCT GCCCCCGACA GCCAGGCCTG      120
GGTTTGTCTT TTTAGGTAGA GTGCCTGGTC CAGGTCATTG GAGGAGAGTC CACATGGCCA      180
CCTCTGGCGT GTTCTAGAGA GGCCCTCCCG TCTAGGCTCG AG                          222
```

(2) INFORMATION FOR SEQ ID NO:443:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

```
CTTTATGACA GCCATGAGCT TTTTCCGGTG CATTGCAATT GTTTTCCAG TCCAGAACAT      60
TAATTTGGTT ACACAGAAAA AAGCCAGGTT TGTGTGTGTA GGTATTTGGA TTTTGTGAT      120
TTTGACCAGT TCTCCATTTC TAATGGCCAA ACCACAAAAA GATGAGAAAA ATAATACCAA      180
GTGCTTTGAG CCCCCACTAC TCGAG                                          205
```

(2) INFORMATION FOR SEQ ID NO:444:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 178 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

```
GAATTCGGCC TTCATGGCCT ACCTGCCTCC CTCCTTGCTT CTGCTCTGC TAACTCAACT      60
CTGCCTTCCT CTTTTTCATT CTCTACTCT GCCCTATATG GAGGACAAAT GGACACCAGG      120
GGTGCTAACC TTATTGGTGC CTGCCCCAGC CTACCCAGG TGCAAGCAGA CTCTCGAG      178
```

(2) INFORMATION FOR SEQ ID NO:445:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 251 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

```

GAATTCGGCC TTCATGGCCT AGAAAGCCAC AAACCTTTTGA GTTTTAACT TCAAAGGCTT      60
CTTTCTCTTT AAAAAAATT ATTTTAAATA TAGAGTCAAA AAATTGGATG TATTATTTTG      120
AGCTTCTAAT TGCTGCCACT TGGAGATGTC CAAGTAAGAA GGCCTTCTTT TTACATGGGA      180
TGAATTGTGC ACTTCTACTG ATGATGACTA CAGCAGAAGT GATGTTATAC GTACAGGCAC      240
TTGAACTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

```

GAATTCGGCC TTCATGGCCT AGGGCTTATA TTTTAACTGA ACTATTATTA AATAAAAAACA      60
AAATAAAATC TTATCATATA GGTGTAATCT GTTCTAAGGA AAAAATCCTT CTATCAAGAC      120
TAAACGTCTA ACTGAATACA GAATGACATT TCATGCCTTA AGGTCTCTGT CCATGTTGTT      180
CCTTCTTTCT ACTGTCCTTT ACTGTATTAG TTCAAACAT TCTAATTCAC TCTCCAAAAC      240
CCAATCAAA CATCACCATC AGAAAGTCTT CCATGATGGG CCAGGTGTGG CGGCCCTCGA      300
G                                     301

```

(2) INFORMATION FOR SEQ ID NO:447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

```

GAATTCGGCC TTCATGGCCT AGCTGAAATG CTTTCTATTG GATACTATCT GGGCATATTA      60
CTTCCTGTGG TTCACTGTCT GGGTGACAGG ATTCATAGAA GCCCAAACCT TAGCACCACG      120
CAGCATACCC TTGTAACAAA GCCACTCGAG                                     150

```

(2) INFORMATION FOR SEQ ID NO:448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

```

GAATTCGGCC TTCATGGCCT AATTGATTT TATTAGGTTT AAATTGTATT TCTTCAAATT      60
TCATAAACTA TAGCATTAT CTCCATATTT TTAATAAATG ATCACAAATA AATCACTGTT      120
AATATCTCCA TTTACACTTT TACAACTCCT GCTATTGCTG GATTTTTCAT CCTATGATAT      180

```

GTAAACCAA TTAAAAATAC ATTAAAGAA TCACAGCTGT CTCGAG

226

(2) INFORMATION FOR SEQ ID NO:449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

```

GAATTCGGCC TTCATGGCCT AAGACTGGGG GCATGTACCC CACCTACTTT CTGCACCTGG      60
ACCGTGAGGA TGGGAAGAAG GTAAGGTTGG TCTGGGCATG TTATCATCTA GGCTTTACAG      120
CCCTTTGAAA TCCTAGGGGC TGAAATGTGA CTGGAAGTCT CATATCTACC GCTGACCTCT      180
CAGTTCCTCA AAGAACTGC CTTCGTGTCT GGTCTGTGCA CATCTTTGTG TTTCCAGTG      240
CATTGTGTG TGTGCACATA TGTGCGTTTG GGAGCTGACG CAACGGAGAG AGTCTGTGTG      300
AGTGGCTCTC ATGACTGTGT GCAGACCAGA GGCTGAGTCT GGAATATGAC CTATTCCAC      360
TCCCAAGGT GTTCTCTCTG GCGGGAAGGA AGAGAAAGAA GAGTAAACT TCCAATTACC      420
TCATCTCTGT GGACCCACA GACTTGTCTC GAG                                     453

```

(2) INFORMATION FOR SEQ ID NO:450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

```

GAATTCGGCC TTCATGGCCT AAAAGCAAAT TAACTTGTTT TGAAAAGAAA GTATAGATTA      60
ATTTGTTTT CTGTTTAAAT TTTATCTCCT TGTAAAGAT TTTTTTTTCC TGGGCAGAAA      120
ACTTGGCATT TTTAGGCGTA GATACCTTAC CTTACAATGC CAAAATGAAT TTAATTCCAG      180
TACTCAGGTT TTTCCCTTTA ACAGACTCTA TGTGTACCAG GCATTGAATT CTAGACCTGC      240
CTCGAG                                     246

```

(2) INFORMATION FOR SEQ ID NO:451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

```

GAATTCGGCC TTCATGGCCT AGTTTGGTGG GGTGGAAGTT GATGGCAAAC TCATGGGAGA      60
CCTTCCAGTC TGGGGGTAAAC TGGGCCCCGA ATCCCAGAGC TGGAAACATC TTATCACTGT      120
CGTAGTCCTG AATGATCTGC CCAACAGCCC AGATGGCCGA CAGATATTCC TTGGTGCCCA      180
TAGGGTTGAT ATAGTGCAA GAGGAAGGGT CGAGGGGATT CCCGTTGGAG GCTGTAAAGT      240
CTATTCCAAC GGTGAACATG AGCTGGCAGC CTCCCAGGAT GTAGTCAAGG AAGGAGTAGT      300
CTCGGTTTAT CTTGCAGGAT CGCAGGATGA TGATGCCCGA GTTTTATAG TTCTTCTTCT      360

```


TCCTCTGCTT CTTGGGGTTG ATGCACTCGA ACTCCAGCGG GACGCTGTCT CGAG

414

(2) INFORMATION FOR SEQ ID NO:452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

GAATTCGGCC	TTCATGGCCT	ACACACTGAC	TGACAGACCA	CGGTATGCCT	TGCACCACCC	60
TGGCTGCTGG	GGTCCAAAGA	GGGATCTGGT	AGACCTGGGC	TGGAATCTCA	GCTTCACCAT	120
TTACCATCTG	GGTGGCCAAT	GGAGTGTTAC	TTGGCCTCTC	TGAGCCTCGG	TTTGTCTCGT	180
CTCTGAAACA	GTAAGATACC	TCCCTTTGGC	TGTTGTGATG	AGGATGAAGG	TTAGCCTATG	240
CCCAGTAGTA	TGCCTGTCCC	TTCATCGATG	CCTGCTCATC	TCACTCTTGC	TCTGGAAACA	300
CCCCTAGTAG	AGGCGCAGAG	GGGCAGGGCC	CACCCACCC	ACCAAAACGT	GGTGCAGAAT	360
GAGGTGATCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

GGGTCCGTCC	GCCGCCACCA	CCCACTCCGG	ACACAGAACA	TCCAGTCATG	GATAAAAATG	60
AGCTGGTTCA	GAAGGCCAAA	CTGGCCGAGC	AGGCTGAGCG	ATATGATGAC	ATGGCAGCCT	120
GCGTGAAGTC	TGTAAGTGA	CAAGGAGCTG	AATTATCCAA	TGAGGAGAGG	AATCTTCTCT	180
CAGTTGCTTA	TAAAAATGTT	GTAGGAGCCC	GTAGGTCATC	TTGGAGGGTC	GTCTCAAGTA	240
TTGAACAAAA	GACGGAAGGT	GCTGAGAAAA	AACAGCAGAT	GGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCGGCC	TTCATGGCCT	AAGAAGTGTC	TCCTGTATCC	ACCTCTTCCT	GGCCTCCCTT	60
CCCCCACTTC	CTGGTCCCTG	TCCACTCCTC	AGGTGAGTGC	TCTCACTTCT	TGAAAGCTCT	120
AGGCACCCCC	GCCTCCCGCC	AGGCTCCCCG	TTGGCTCCTG	GCAGGCCAGC	TGAGAAATGAA	180
CAGGAGATGG	AGGCAGGCAG	CCCAGGCTGC	AGAGGTGAGG	GATGTGGGGC	CAGGCCCAGA	240
GGGCTCAGCC	TAGAGGCTTC	CAATCTCAGA	TTCTCCTGCC	TGTGGTCATC	TGTTTGTCCA	300
TCACCCAGG	ACAGGGCAGA	CAGAGGGGCA	AAGCACTGGG	GGCCCCAGAG	CCTAGCTTCC	360
CCTCAGCCTG	GGGGAAACTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

```

AGAGCACGTC AATGCCATGA GGGGCCTGCA AAGCAGCAAG GAGCTCAAGG CTGAGCTGGA      60
CGGGGAGAAG GGCCGGGACT CAGGGGAGGA GGCCCATGAC TATGAGGTGG ACATCAATGG      120
TTTAGAGATC CTTGAATGCA AATACAGGGT GGCAGTAACT GAGGTGATTG ATCTGAAAGC      180
TGAAATTAAG GCCTTAAAGG AGAAATATAA TAAATCTGTA GAAAACTACA CTGATGAGAA      240
GGCCAAGTAT GAGAGTAAAA TCCAGATGTA TGATGAGCAG GTGACAAGCC TTGAGAAGAC      300
CACCAAGGAG AGTGGTGAGA AGATGGCCCA CATGGAGAAG GAGTTGCAAA AGATGACCAG      360
CATAGCCAAC GAAAATCACA GTACCCTTAA TACGGCCCAG AATCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

```

GAATTCGGCC TTCATGGCCT AAATTTTCATG AAAACAAAT GGCTTAAACC CAGGGAAGCA      60
AGGATTATAA TTGATTTTTT TGAGCAATGT CTCTTTTGGT TACAAAGTAA AAGGTAAAAAT      120
AAAAGTTTAA AAGCATTGCG AAAGAATGTT CTTTGGTTTT TCACTCAGT AACCTAAAGT      180
TTAATGACCC TTTACAGTGC TGATAAACAC TTAAATTTTT GCAGTAGGCA TTGCTAGTTC      240
AAATTGAAGG AAGGTTGCCA GGCTCATGCC TATAGTCCCA ACTACTTAGG AGGCTAAGGC      300
AGGGGGACGC CCTCGAG      317

```

(2) INFORMATION FOR SEQ ID NO:457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

```

GAATTCGGCT TCATGGCCTA CTGCTCTTTG GCTAAGGTGG CAGTGTACCT CTAGATCAAC      60
CTGGGCAACA GTCACAAGGG AGTGTGACTT CTTGGCCATA ATAACTCAC TTGATAGTGT      120
TTATGTTATT AATCTGAATG CAACAGAAGA CAAAAGCACA GGCATGCACA CACACAGAAC      180
CCCAAACCACT TAAAACTAC CTAAACACTG ACTTAGTAAA TAGTAAAAAG GTAATGTTGG      240
GACTTTTAAA CCTTGAATCC ATTAGCCAGG CTTGGGATGA AAGGACCATC TAAATCATG      300
CTAGTCTAAA CCATGCTCTT CCACACAGCT GTTTAAAAAC CACTGGGTAT GAGGAATATG      360
CTAGAAAGAA ATGTTAAAAA TAGATTGTTG GCTCACACTT ATTTTCTAA TAAATAGGAC      420
CATTATTACT ACCAGGAAAG TCTTATTAT TTTGCCTGAA ATTGGCTTAA AGAAAGTCTC      480

```

ATGACGGGAT GGGATGGGCC GGCACCTCGAG

510

(2) INFORMATION FOR SEQ ID NO:458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

```

GAATTCGGCC TTCATGGCCT AGCGGAAACA ACTGAACTA ATGGAAGATA TGGATACAGT      60
AATTAAACCC CGTCCTCAAG TAGTAAACA AAAAAACAG CGACCAAAT CTATTCACAG      120
AGATCATATT GAATCCCCCA AAACACCAAT AAAGGGTCCT CCAGTCTCTA GCCTTTCTTT      180
GGCATCGCTG AACACGGGTG ATAACGAGAG TGTACATTCA GGCAAGAGGA CGCCAAGATC      240
AGAGTCTGTA GAAGGCTTCT TATCTCCAAG TCGTTGTGGC AGTCGAAATG GAGAAAAAGA      300
CTGGGAGAAT GCATCAACAA CTTCTTCAGT GGCTTCTGGA ACAGAATATA CAGGACCAAA      360
GCTCTACAAA GAACACCTCG AG                                         382

```

(2) INFORMATION FOR SEQ ID NO:459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

```

GAATTCGGCC TTCATGGCCT ACTGAGTCCC AGGCCGGGGC CCTGCCCCAG CCAGGGCTGG      60
GACTCTGCAG TTGGGAGCTT GTCCAGCTGC CCCCTCTAAT GCTTTTCTCC TCCAGGACAC      120
AGGGAGCCTC CGGAAGCACA GTAGTCCCCG TGTGTCACCT TAGGCTGACC TCTGTCCCCA      180
GGGGTGACGT AATGCTGTCA CTGTCTTGAA TTCTTCATCG TTTAACAGGG AGCCCAAGTG      240
TTTACCAAAA AGCAGAATTG GATTTTTTTT TTAAGTCGAT AAATTTTAC TCAAGGAATT      300
CCATGTTGTG ATTTCTTCCA CTGTCCATCA AGGTCACTTT AGATCCTCTA AAGAGCTAGA      360
GTCAAAAGAT TTATCTTCAA GTTAGTCCTT TTTAATGAAA CCGATGCTTA TTTAATCCA      420
GTCAGCCCTC GAG                                         433

```

(2) INFORMATION FOR SEQ ID NO:460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

```

GTCCGGCTAA AGTAATCCAG TCACCTGCTG CTGATACTAG AAGGGCTGAG ATGTCACAAA      60
CAAATTTTAC CCCTGACACT CTTGCCCAGA ATGAAGGGAA GGCTATGTCT TATCAGTGTA      120
GCCTTTGTAA GTTTCTATCA TCATCCTTTT CCGTGTTAAA AGATCATATT AAGCAACATG      180
GTCAGCAAAA TGAAGTGATA CTGATGTGCT CAGAGTGCCA TATTACATCT AGAAGCCAGG      240

```

AGGAACTTGA AGCCACGTG GTGAATGACC ATGACAATGA TGCCAATATC CACACCGAAC 300
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:461:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 563 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT AAGAAATATC AGTCCAAGCA AGAGGAATTA CAGAAAGATA 60
 TGCAAGGAAG TGCACAGGCA TTGGCTGAAG TAGTGAAAAA CACAGAGAAC TTCTTAAAAG 120
 AGAATGGTGA AAAGCTGTCA CAGGAAGATA AGGCTTTGAT TGAACAGAAA CTTAATGAAG 180
 CTAAGATAAA GTGTGAACAG CTTAATTTAA AAGCAGAACA GTCTAAAAAG GAGCTGGATA 240
 AAGTTGTGAC AACAGCAATC AAGGAAGAAA CTGAAAAGGT AGCAGCAGTG AAGCAGCTGG 300
 AAGAGAGCAA AACCAAAATA GAAAACCTTT TGGACTGGTT GTCAAATGTT GACAAAGACT 360
 CAGAAAGGGC AGGGACAAAA CACAAACAGG TAATCGAACA GAACGGGACC CATTTTCAAG 420
 AAGGTGATGG CAAGTCAGCA ATTGGAGAAG AGGATGAAGT TAATGGTAAC CTGTTGGAGA 480
 CTGATGTTGA TGGGCAAGTT GGAACCACTC AGGAGAATCT GAATCAGCAA TATCAGAAAG 540
 TTAAGGCCCA ACATGGACTC GAG 563

(2) INFORMATION FOR SEQ ID NO:462:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 477 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GCGGCTGTGA AGATGGCGGC GGCTGCGTGG CTTCAAGTGT TGCTGTGCAT TCTTCTGCTT 60
 CTGGGAGCTC ACCCGTCACC ACTGTCGTTT TTCAGTGCGG GACCGGCAAC CGTAGCTGCT 120
 GCCGACCGGT CCAAATGGCA CATTCCGATA CCGTCGGGGA AAAATTATTT TAGTTTTGGA 180
 AAGATCCTCT TCAGAAATAC CACTATCTTC CTGAAGTTTG ATGGAGAACC TTGTGACCTG 240
 TCTTTGAATA TAACCTGGTA TCTGAAAAGC GCTGATTGTT ACAATGAAAT CTATAACTTC 300
 AAGGCAGAAG AAGTAGAGTT GTATTTGGAA AACTTAAGG AAAAAAGAGG CTTGTCTGGG 360
 AAATATCAAA CATCATCAA ATTGTTCCAG AACTGCAGTG AACTCTTTAA AACACAGACC 420
 TTTTCTGGAG ATTTTATGCA TCGACTGCCT CTTTATAGGAG AAAACAGGA GCTCGAG 477

(2) INFORMATION FOR SEQ ID NO:463:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 382 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

```

GTTGCACTCC TGTGTACTC TTTAGAGGT GGAAAAGAGG TGGATACTGA GATCTAAGAG      60
GAAAGGATAG TCATTCACGT TCTGAGATAT GCGCTCTCTC TATTGTTCTC GAACACAAAG      120
GGATAGTCTC TTTTCTGGAG CTGATGTCCC TGCTTGAGG TTAGCCCCAA AACATGGCTC      180
TTGTATTGTT CTAAGAGAAA AGGCTTTTCAT TTTGGTTCTT CTGATTGGTG TTACCTACTG      240
CCTAATATGT GTTCATTTTT TGACAGAGAG GCAGACTATT GAAAAAGTCT GTGTGAACAG      300
AGAGCAGTTC ATTAAGCCCA TTGCTTTTCAG TAATGTGGCC TTGACCCCTT CTGCTTCCCC      360
CTTCTCCCAT GACGAGCTCG AG                                         382

```

(2) INFORMATION FOR SEQ ID NO:464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

```

GGACCTGCCT CAAGGACATG GGTGGACATA TGGGCGGACT CTCAGGGACA TCCAAAGTGA      60
TGATCACACT GACCGATGTC AATGACAACC CACCAAAGTT TCCGCAGAGC GTATACCAGA      120
TGTCTGTGTC AGAAGCAGCC GTCCTGGGG AGGAAGTAGG AAGACTGAAA GCTAAAGATC      180
CAGACATTGG AGAAAATGGC TTAGTCACAT ACAATATTGT TGATGGAGAT GGTATGGAAT      240
CATTTGAAAT CACAACGGAC TCTAAACAC TCGAG                                         275

```

(2) INFORMATION FOR SEQ ID NO:465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

```

GTTCTAGACC TACCCCGAAC AGCCCCAAC AGTCAGAGTG GCACAAAATG ACAGTCTCCA      60
AAAACTGCCC CGACCAAGAT CTCAAAATCA AACTTGCTGT CCGAATGGAT AAGCCTCAAA      120
ACATGAAGCA TTCTGGGTAT TTATGGGCCA TCGGTAAGAA TGTCTGGAAG AGATGGAAGA      180
AAAGGTTTTT TGTATTGGTG CAGGTCAGTC AGTACACGTT TGCCATGTGC AGTTATCGGG      240
AGAAGAAAGC GGAGCCTCAG GAACTTCTAC AATTGGATGG GTACACTGTG GATTACACCG      300
ACCCCCAGCC AGGTTTGGAG GGTGGCCGAG CTTTCTTCAA TGCTGTCAAG GAGGGAGACA      360
CCGTGATATT TGCCAGTGAC GATGAACAAG ACCGCATCCT GTGGGTCCAG GCCATGTATC      420
GGGCCACGGG GCAGTCACAC AAGCCTGTGC CCCCAGCCCA AGTCCAGAAA CTCAACGCCA      480
TCCTCGAG                                         488

```

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```

GAATTCGGCC TTCATGGCCT AGCCGCTGCC GTGAGCCTTG AAGCCTAGGG CGCGGGCCCG      60
GGTGGAGCCG CCGCAGGTGC AGATCTTGGT GGTAGTAGCA AATATTCAAA CGAGAACTTT      120
GAAGGCCGTC TGAGCTAAAA AATAATGCTG ATTTGGCCTC ATCATATTTA TGAAGGAGGG      180
AGAAATAGAA GCATGTATAA TGTAGAAAAA CATATCTTAT CTTTATGTTT GCATATATTG      240
TTGAATAAAT ATAGTTTAAT GAATATGTTT TCTCACCTTT CTTTGCTTGC ACTTCTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```

GTTCTAGACC TGCCTCGAGA TATGCCGGA GGTTCATGG CTGGTCCCAG GGCCAGCACA      60
GGCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTTAACT TTATTTCTG TTTTATGAGT      120
GTGTGTCCGC CCACCCACAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC      180
CTGCCCTCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG      240
CAGAGGGCGG ACCGGGTGGG CAGGGGCCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT      300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCCTTT TAAACAAAA TGCCCTCGTT      360
TGTAACCCCT TAACGCTCGA G                                381

```

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

```

GCTGTCCAAT TATACTGACC TGGCCATGAG CACGGTGAAG CAGACCCAAG CCATTCCATA      60
TACTGGTCCC TTAAATTGCT TCTGTTACCA GCTGCAGAAA TTGACAGGTG ATGTGGAAGA      120
ATTAGAAATT CAAGAAAAAC CTGCTCTGAA AGTGTTCAAA AATATTACTG TAATACAAGA      180
ACCAGGCATG GTGGTATTAG AATGGCTGGC AAACCCTTCT AATGATATGT ATGCAGATAC      240
AGTAACAACG GTGATATTGG AAGTTCAGTC AAATCCCAAA ATAAGAAAAG GCGCAGAACT      300
CGAG                                304

```

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

```

GCGATTGAAT TCTAGACCAC CCCGCACTCC AGCCTGGGCA ACAGAGCAAG ACTCTTTCTT      60
AAAAAATTA AAAAAAAAAAG GAGTACCCAT TGGGATAAAC CTCTTTGGAG GAGAGGACAT      120

```

```

AGTACAGAGG TTATACTGCA ACATGGACCC ACCAATAGCC ATGGATAACT TAGTTGGGAT      180
TACCCTGCCC TGCTGTTTAG ATACTTACAT GGACACTAAT TTCTGCCCAT CAACCTCCCT      240
CTCTTTCTCC TTCAATGCC ATCAACCTCC CCCTCTTTCT CCATCAATGC TATGTTGGTT      300
TTTTTTATTT GCCATCTTGG CAGGTTTAGG GCAGAGCATG CTCGAG                      346

```

(2) INFORMATION FOR SEQ ID NO:470:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

```

GAATTCGGCC TCATGGCCT AGGATTTTCA GCAAGAATTA AATTATTCTG CATATTGGAC      60
AGGGCCTATT TAGAGGCCTG CACATCTGTT TTTATCCATT TGTGTAACGA TACCGTGTGT      120
GAAAGTAGGT TCATGGATCA GATGAGAAAA GTCAATTCTC TAAGATACCT TCCCTGTGG      180
CTGTGGATTC TCACCTTGAT GATTGAGCTT TGTGTGATGG AGGTGCTCTGC CAGAGAATTC      240
CTGGCCACCC AGCTCCTCAG CCCTCTGCCC CCACCCCAA TACACACACC TTTCTCCATT      300
GTACCAGATG CTGGTCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:471:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 417 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

```

GAATTCGGCT TCATGGCCTA CTTCATTAC TGTAAAACCA ATAGCAAACA ACGGAAGAGA      60
CGGGCAGAGT TGAAGCAACA AAGAGAGGAG GAGGCAACAT GGCAAGAGCA GGAAGCCCCT      120
CGGAGAGACA CTCCCACCGA AAGTTCTTGC GCAGTGGCCG CCATTGGCAC CCTGGAAGGC      180
AGCCCCCAG GTATCTCCAC CTCCTTCTTT AGGAAGGTGC TGGGCTGGCC CCTCAGGCTG      240
CCGAGGGACC TGTGTAACG GATGCAGGGA CTCCTGCAAG CTGCTGGCCT CCATATCAGG      300
GACAATGCTT ACAACTACTG CTACATGTAC GAGCTCCTGA GCCTGGGGCT GCCACTCCTC      360
TGGGCGTTCT CTGAGGTCCT GGCAGCCATG TACAGGGAAT CTGAGGGCTC CCTCGAG      417

```

(2) INFORMATION FOR SEQ ID NO:472:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

```

GAATTCGGCC TTCATGGCCT ACAAGAGGCA GCTTATAGAC AACCGCAAGC TCATTGAGAC      60
GCAAATGGAA CGGTTCAAAG TTGTGGAACG AGAGACCAAA ACCAAAGCTT ACAGCAAAGA      120
GGGCTGGGC CTGGCCAGA AGGTAGATCC TGCCAGAAG GAGAAGGAAG AGGTGGCCA      180

```

GTGGCTCACG AATACCATCG ACACGCTCAA CATGCAGGTG GACCAGTTTG AGAGTGAAGT	240
GGAGTCACTG TCAGTGCAGA CACGCAAGAA GAAGGGCGAC AAGGATCAGA AGCAGGACCG	300
GATTGAGGGC TTGAAGCAGC AGCATCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

GAATTCGGCC TTCATGGCCT AGAGGTGCTT CAGTGGTACA ATCAGTTAGC ACACAGTACG	60
TATACAGCAG TATGTGTGTG AGAAATTATT TTAAATATAA GAATTATCAA AAATTATAAG	120
AAGACCATCC CTTAACTGA ATAGTTTCAC CAAAAATCAG AAAAAATATGT AAGTGATACA	180
TTTTGTTTCT TGGATATAGC AATGTACCAC CTTGCATAAA TGAGACTATT AAAATGATCA	240
CCTGAGGTCA JAAGTTCGAG	260

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

GAATTCGGCC TTCATGGCCT ACAAAGATTT GAGGAAAAGA GGTTCAAATT GGACCACTCA	60
GTGAGTAGCA CCAATGGCCA CAGGTGGCAG ATATTTCAAG ATTGGTTGGG AACTGACCAA	120
GATAACCTTG ATTTGGCCAA TGTCAATCTT ATGTTGGAGT TACTAGTGCA GAAGAAGAAA	180
CAACTGGAAG CAGAATCACA TGCAGCCCAA CTACAGATTC TTATGGAATT CCTCAAGGTT	240
GCAAGAAGAA ATAAGAGAGA GCAACTGGAA CAGATCCAGA AGGAGCTAAG TGTTTGGAA	300
GAGGATATTA AGAGAGTGGA AGAAATGAGT GGCTTATACT CTCCTGTCAG TGAGGATAGC	360
ACAGTGCCTC AATTTGAAGC TCCTTCTCCA TCACACAGTA GTATTATTGA TTCCACAGAA	420
TACAGCCAAC CTCCAGGTTT CAGTGGCAGT TCTCAGACAA AGAAACAGCC TTGGTATAAT	480
AGCACGTTAG CATCAAGACT GAAAACTCGA G	511

(2) INFORMATION FOR SEQ ID NO:475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCGGCC TTCATGGCCT AGTCACAGCT GTCTATTTTT GTCAGTGTG GAACATTGTT	60
CATCGTGATT TAAAAGCTGA AAATTTACTT CTGGATGCCA ATCTGAATAT CAAAATAGCA	120
GATTTTGGTT TCAGTAACCT CTTCACTCCT GGGCAGCTGC TGAAGACCTG GTGTGGCAGC	180

CCTCCCTATG	CTGCACCTGA	ACTCTTTGAA	GGAAAAGAAT	ATGATGGGCC	CAAAGTGGAC	240
ATCTGGAGCC	TTGGAGTTGT	CCTCTACGTG	CTTGTGTGCG	GTGCCCTGCC	ATTTGATGGA	300
AGCACACTGC	AGAATCTGCG	GGCCCGCGTG	CTGAGTGGAA	AGTTCCGCAT	CCCATTTTTT	360
ATGTCCACAG	AATGTGAGCA	TTTGATCCGC	CATATGTTGG	TGTTAGATCC	CAATAAGCGC	420
CTCTCCATGG	AGCAGATCTG	CAAGCACAAG	TGGATGAAGC	TAGGGGACGC	CGATCCCAAC	480
TTTGACAGGT	TAATAGCTGA	ATGCCAACAA	CTAAAGGAAG	AAAGACAGGT	GGACCCCTG	540
AATGAGGATG	TCCTCTTGGC	CATGGAGGAC	ATGGGACTGG	ACAAAGAACA	GACACAGAAG	600
GCGGCTCGAG						610

(2) INFORMATION FOR SEQ ID NO:476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

GGAGATTGGC	CACCTCCAAG	ATATGGTAAG	GAAAAGTGAA	CAAGGTCTTG	GCTCTGCAGA	60
AGGACTTATT	GCTAGTCTTC	AGGACTCCCA	GGAAAGGCTT	CAGAATGAGC	TTGACTTGAC	120
TAAAGACAGC	CTAAAGGAGA	CCAAGGATGC	TCTATTAAAT	GTGGAGGGTG	AGCTAGAACA	180
AGAAAGGCAA	CAGCATGAAG	AAACAATTGC	TGCCATGAAA	GAAGAAGAGA	AGCTCAAAGT	240
GGACAAAATG	GCCCATGACT	TAGAAATTAA	GTGGACTGAA	AATCTTAGAC	AAGAGTGTTC	300
TAAACTTCGT	GAAGAGTTAA	GGCTTCAACA	TGAAGAGGAT	AAGAAGTCAG	CAATGTCTCA	360
ACTTTTGCAG	TTGAAAGATC	GAGAGAAAAA	TGCAGCAGAG	AAACTCGAG		409

(2) INFORMATION FOR SEQ ID NO:477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

GTATGCCTGT	TCCAGACCAG	CCTTCATCAG	CCTCAGAGAA	GACGAGTTCC	CTGAGCCCCG	60
GCTTAAACAC	CTCCAACGGG	GATGGCTCTG	AAACAGAAAC	CACCTCTGCC	ATCCTCGCCT	120
CAGTCAAAGA	ACAGGAATTA	CAGTTTGAAA	GGCTGACCCG	AGAGCTGGAG	GCTGAACGGC	180
AGATCGTAGC	CAGCCAGCTG	GAGCGATGCA	AGCTCGGATC	CGAGACTGGC	AGCATGAGCA	240
GCATGAGTTC	AGCAGAAGAG	CGGATACTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

GAATTCGGCC	TTCATGGCCT	ATGCGTGGGG	GTGGGGGGGC	AGGCTAGAAA	GGAGCCCTCC	60
CTCCTCGGG	TGTCTAGGGT	GTGCTGGCCA	CTGGAAGATT	GGAGTCGCTG	ACCCAGTGCT	120
GACCCTGACC	CTTGGCTGGG	TCCACTCTGC	AGACTCCACC	TGAGGAGACC	CACCCAGGGT	180
GAAGCTCGGT	GCCCAGGCCT	GAACTGAGCC	CGGCCGGGTG	CAAGGGCTGA	GGTGTGAGGT	240
CGGCCAGGC	CTCTCCCAG	GCCTGAGGGT	GGCTACAGCT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:479:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

GAATTCGGCC	TTCATGGCCT	ACTAAATTTT	CCAAAACGTT	GATTTGCATA	ATACAGTGGT	60
ATGTGCAATG	GATAAATTGC	CGTTATTTCA	AAAATTAAAA	TTCTCATTTT	CTTTCTTTT	120
TTTCCCCCT	GCTCCACACT	TCAAAACTCC	CGTTAGATCA	GCATTCTACT	ACAAGAGTGA	180
AAGGAAAACC	CTAACAGATC	TGTCCTAGTG	ATTTTACCTT	TGTTCTAGAA	GGCGTCTCTT	240
TCAGGGTTGT	GGTATTCTTA	GGTTAGCGGA	GCCTTTTCCT	CTTTCCCCCA	CCCATCTCCC	300
CAATATTGCC	CATTATTAAT	TAACCTCTTT	CTTTGGTTGG	AACGACCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:480:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 263 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

GAATTCGGCC	TTCATGGCCT	ATTAAAAGAA	TGTTCTTTCA	TTAAAAGACC	AAAAAGAAGT	60
TAAAACCTAA	ATTGGGTGAT	TTGTGGGCAG	CTAAATGCAG	CTTTGTTAAT	AGCTGAGTGA	120
ACTTTCAATT	ATGAAATCTG	TGGAGCTTGA	CAAAATCACA	AAAGGAAAAT	TACTGGGGCA	180
AAATTAGACC	TCAAGTCTGC	CTCTACTGTG	TCTCACATCA	CCATGTAGAA	GAATGGGCGT	240
ACAGTATATA	CCGTGTTCTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:481:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 379 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

GGAGCAGGAA	GAAATGCAAG	AGGAGATGGA	GAAGCTGCCA	GAGGAAAACG	AGACTCTCAA	60
GAACGAGATC	GATGAGCTGA	GAACCGAGAT	GGACGAGATG	AGGGACACTT	TCTTCGAGGA	120
GGATGCCTGT	CAACTGCAGG	AAATGCGCCA	CGAGTTGGAG	AGAGCCAACA	AAAAGTCCG	180
GATCCTGCAG	TACCGCCTCC	GCAAAGCCGA	GCGCAAAGG	CTCCGCTACG	CCCAGACCGG	240

GGAAATCGAC	GGGGAGCTGT	TGCGCAGCCT	GGAGCAGGAC	CTCAAGGTTG	CAAAGGATGT	300
ATCTGTGAGA	CTTCACCATG	AATTAGAAAA	TGTGGAAGAA	AAGAGAACAA	CAACAGAAGA	360
TGAAAACGAG	AATCTCGAG					379

(2) INFORMATION FOR SEQ ID NO:482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC	TTCATGCTTT	CTAGGCAAGA	GGTCATCAGA	AGATTGAGAG	AAAGAGGAGA	60
ACCAATCAGA	CTATTTGGAG	AGACTGATTA	TGATGCTTTT	CAACGTTTAA	GGAAAATAGA	120
GATCCTCACA	CCAGAAGTTA	ACAAGGGATT	GAGGAATGAT	TTGAAAGCAG	CCTTGGATAA	180
GATTGATCAG	CAGTACCTCA	ATGAAATCGT	CGGCGGTCAG	GAGCCTGGAG	AGGAAGACAC	240
ACAGAATGAT	CTGAAAGTTC	ATGAGGAAAA	CACCACAATT	GAAGAGTCAG	AGGCCCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

TGGTCTCCAG	AAATGCTTTG	GGTTCATCTT	TCATTGCTGC	AAGGAACTTC	CATGCCTCTA	60
ACACTCATCT	TCAAAAGACT	GGGACTGCTG	AGATGTCCTC	TATTCTTGAA	GAGCGTATTC	120
TTGGAGCTGA	TACCTCTGTT	GATCTTGAAG	AAACTGGGCT	ATCTCGAG		168

(2) INFORMATION FOR SEQ ID NO:484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GCAAGCTCTC	CATGGAAACC	CCTGCCAAAA	CAGAAGAGAT	AAAACTGGAA	AAGGCTGAGA	60
CAGAGTCCTG	CCCAGGCCAA	GAGGAGCCTA	AATTGGAGGA	ACAGAATGGT	AGTAAGGTAG	120
AAGGAAACGC	TGTAGCCTGT	CCTGTCTCCT	CAGCACAGAG	TCCTCCCCAT	TCTGCTGGGG	180
CCCCTGCTGC	CAAAGGAGAC	TCAGGGAATG	AACTTCTGAA	ACACTTGTTG	AAAAATAAAA	240
AGTCATCTTC	TCTTTTGAAT	CAAAAACCTG	AGGGCAGTAT	TTGTTAGAA	GATGACTGTA	300
CAAAGGATAA	TAACTAGTT	GAGAAGCAGA	ACCCAGCTGA	AGGACTGCAA	ACTTTGGGGG	360
CTCAAATGCA	AGGTGGTTTT	GGATGTGGCA	ACCAGTTGCC	AAAAACAGAT	GGAGGAAGTG	420
AAACCAAGAA	ACAGCGAAGC	AAAGGACTCG	AG			452

(2) INFORMATION FOR SEQ ID NO:485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

```

GTTTGTAAT CACCTGATGA TGGTGATATA GCTGTGGCCA ACGAAATGTC AAGGGAAGTC      60
TGCTGGGGAA GGTAGACGTA GGATAGGAGT ATGGGAAAAA ATTATTCACT CAAAAGCATG      120
ATGCACAGAG GAGCTATGAT CTTTCTTGT TTTCTCACT GGATGTTGTC ATGCTCTGTAT      180
GTACTTCCTG GAACTGTGGC ACCATCTTAC AACCATGAAA GGAGCTCACA TGAAATCATG      240
TTGAACATAG CAGAGCGGGA AGATGGAAGG AATCCGAGAT CTATGTTTGA TGTTAAGCGA      300
TGATGTTAAA AACTTAAAAA ACTCCAGAAC TCTCTTACCC CTGGTGCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GAATTCGGCC TTCATGGCCT ACTCAGCTGG AAGCTTTACT CCCTCCTCGA CAGAAAGTGA      60
GGATTACAGA TGACATGGAT CAGGTGGAGC TGAAGGAGTT TTGTCCCAAT GAGCAGAACT      120
GGCGTCAGCA CAGGGAGGCC TACGAGGAGG ACGAAGACGG GCCCCAGGCT GGAGTGCAGT      180
GCCAGACGGC ATGACGTGGT GCGGGGCAGC GTGGCCCCAC CGGACTAGCA CATGATGAAT      240
GTAAAGTTGG CACAATGAAA ATGACATCGC TTTAATGGCC TTGTGTTTGG GATGTCCTGT      300
GTATGTGTTT AGCATTCTTA ATTGCTGAGT GTCCTTTTGG CTTTCTTTT GGTGTAACT      360
TAAGTTATAG CTTAATTTAT ATTTAAATGT TTTAAGTATA AATCACCTCT AGGCCTCGAG      420

```

(2) INFORMATION FOR SEQ ID NO:487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GGAGTGTCAG GAATAACCGC TCAGGTTGAG TGTAATAATA TTTTATGGTC CCATCAGCAT      60
CAACCTGCCT TAATGCTTCT TTGGTTGTCT CTTAGCTAG TTCTTATTTT ACAGCACATG      120
ATATATGAAG TGATTTCACA CCATGCCCAA GATACGGGCC ACCCACCAGC TACATGGCAT      180
GATGACTCTG CAGGCCGAAC GGCAGCCTTG ATAATTATAA GGCCATGGGT AATAGCCCCC      240
CAGGGGTTCA CAGATCTTCT GGCAGTGGGT GTAGCTCCGC CTACATTCTA TACAACAGAT      300
TCCTTCGCCT GCCTCGAG                                318

```

(2) INFORMATION FOR SEQ ID NO:488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```

GAATTCGGCC TTCATGGCCT AGGTGTTTGC TTAAAGGAGG AATAGAAAAA TCAGGTGGTC      60
ACTACTACAA GGGAAAGGGG AATGTGGTTT CAAAAGGGT TTTGCCTTAT TTATTTTAT      120
AGTAGATACT TATTAATCAA ACATTTAAGA GCAACTCAGT AAGTATTTGT CCAGAATGAA      180
CTGTTCTCAA GACTAGGTTT ACTGCTTGAC ATTAGAGGTT AAGGTGTTGC AATTCTGAGT      240
CTTGTTTTTT ATTACTACCA ACCCCCACCC CCGCCGATAT TACTTCATCT CCCTCCAAGG      300
TCACTGAAGT TTTTCATAAC TATTTTAACA GATATTGCAA TAAATGTACA GTAATTTAAC      360
TATCCTTCTT GCTGGGCATG TCAAAGTGTT TTCTATTATT ACAGATAATG CTGCAATGAA      420
TCTTTATTTA TATAATACAC TTTTATCCAG TTGTCATTTT TTCTTTGTCT TATATTCTCA      480
CATGGAA                                         487

```

(2) INFORMATION FOR SEQ ID NO:489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACA AAAACTGTGA ATAGTGAGTG ATTTAAAAAA      60
AAAAAATAAA CTGAAAGGAA AATTGTTGAA TGTTTGAATC TTGCCTAGTC CCCTCACCCC      120
CAAGGCTGGC TTCTAGAGTT AAGCTCGAG                                         149

```

(2) INFORMATION FOR SEQ ID NO:490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

```

GCAAAATTTG GAAGATTTAG ACCATTATTT CTCAAATAT TTCTTACCTG CTCTCTCCTC      60
TTTCTCCAC TCCTCCCAT CACCTTCTGG CACTTCCATT GTTCATATAT TGATATGCTT      120
AATGATGTTT CTGAAGATTT ATTCATTTT CCTTATTCC TTTTATTCT GTTCCTCAGC      180
CCAGATCATT TCAATGCACA TATCCTCAAG TTTGCTGATT CTTTCATTTC CTGCTCAGAT      240
CTGCTGCTGG CCCCTCGAG                                         259

```

(2) INFORMATION FOR SEQ ID NO:491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

```
GAATTCGGCC TTCATGGCCT ACAAATGTTT AATCAGAGAC TCATATTCAC CTTTAAGTAA    60
AAAACATACT TCTTTCCCCC TAATAGTCAC AGCATTCTGC AGAGCTAAAG AAGGAGACCA    120
GGAGTCTGTG GGAGCAAAGA TCATTTTGTG AAGCTAGAGG TCCAATTTAA AAGCAGTTGC    180
TGCTACAAAT TAAAACATAT TTGCATTCTG CCTAAAATAG TTGTCTCTTT GAACGTTGGG    240
TGCCTTTTTT AGGTTGCTTT GTGAATAATA TGCACAAAAT GAAAATGTTA AAAAAACAT    300
GTAGCCTGCT AACCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 224 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

```
GAATTCTAGA CCTGCCTCCA GCCACTTCAA ACCTTTGGTG ACCAAAGTGG GGTAAAAACA    60
AGCACCTGCG TCGTGTGTGG TTATTCTATG CTCTCCAATA TATATAAATT TTAAGAAGTT    120
TTTCTTGAGG TGGTCAGTTC TTAAACCAAG AAAGTGGTAG TAGTTGATTT TAATTAGTGT    180
AAAGTTGTCT TCGTAACTTC CGTGTGGT GGAATAGCT CGAG
```

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 320 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

```
GAATTGCCTT CATGGCCTAC CGAATCAGAC AGAAGAAAGC CCAGGGCTCC ACTTCTTCTA    60
CAAGGTTGCA TGAGCCCGAG AAGAATGCCA GAGAAATAAC ACAGGACACA AATGATATCA    120
CATATGCAGA CCTGAACCTG CCCAAGGGGA AGAAGCCTGC TCCCAGGCT GCGGAGCCCA    180
ACAACCACAC GGAGTATGCC AGCATTGAGA CCAGCCCGCA GCCCGCGTCG GAGGACACCC    240
TCACCTATGC TGACCTGGAC ATGGTCCACC TCAACCGGAC CCCCAGCAG CCGGCCCCCA    300
AGCCTGAGCC GTCCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 504 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

```

GAATTCGGCC TTCATGGCCT AGGTAGCTCT ATGGTTTTC TCGCGTTCTT GAGTCGGGAA      60
ATGGCCGCTG TGTGGTTGCA ACGGAGATAA ATTCCCGGAA CCGCGATTCC GCGTGTGAGG      120
AATTCGAATT TAGAGTTTAA TTTCTCAGAG CATTCTCTCC AGGAAGAATT TTTACAGTAT      180
CTCAAAGACT TCACTTGACT TCTTGATCCT GCATAAAACC AAGGAGAAAA GAAATGGGTC      240
GCTCCAATTC TAGATCACAT TCTTCAAGGT CAAAGTCTAG ATCACAGTCT AGTTCTCGAT      300
CAAGATCAAG ATCTCATCT AGAAAGAAGC GATACAGTTC TAGGTCTCGT TCCAGAACAT      360
ATTCAAGGTC TCGTAGTAGA GATCGTATGT ATTCTAGAGA TTATCGTCGC GATTACAGAA      420
ATAATAGAGG AATGAGACGA CCTTATGGGT ACAGAGGAAG GGTAGAGGG TATTATCAAG      480
GAGGAGGAGG TAGAAACCTT CGAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

```

GAATTCGGCC TTCATGGCCT ACCAACTTAG TCATTTGAAG CCCAAGAGTC TAATTTTATA      60
TGCCCTGCCA ATGTCCTCAT CTATTGCAGA ATGNATAATT ATCTATTTGT TTTGGACTAT      120
ATGTACAAA AATTTAAAC ATAAGATCCT CTCTCTATAT TTCATTATTG GTGAACCCAC      180
ATTGCTCGAG                                         190

```

(2) INFORMATION FOR SEQ ID NO:496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

```

GAATTCGGCC TTCATGGCCT AGGTAAGAAA ATCGTCAATG AATTGTGGCA TGACCAGGTG      60
GAGAGTAAGT GTCATAAGA GGGATAGTGG ATAGTATAAT GTCAGGCACC TCAAAGGAAC      120
TGGGCAGGGA GTTAGGGAGT AAAAAGGGCG GTGGTCTGGA AGCAGAAAGG AGGAGCAGTG      180
GTCCAGTAGG GGCTGCAGAG CTGCAAGGCT TTGCCTCAAT CCTGTCAAAG GCAACTTCAA      240
GCTTTCCAGG AGCCATACTC CTTCAATTGT TCATTACTTT CTAGATTAGG AAATCACCAC      300
TCGAG                                         305

```

(2) INFORMATION FOR SEQ ID NO:497:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

```

GAATTTCGGCC TTCATGGCCT AGGTGGACCA ATGTACAGCA CTCAGGTTCA TGGCCAACTG      60
GGTGGACTAT TTCAGTACTC TACAGGTGCC TCAGTGGAGG GAGAGCCCAT TGTCCAGGTG      120
CTTCCTGGGA CAATACCAGA GCGCTCTGGG AAAAGGGCTG CTTGCAGGCA CGAGGGCTCA      180
CAATGAGCCA TGGTGGGCCA CCGCCACGGC CCATGCAGCC TAATAGCAAG CCAAGGCAGG      240
AAGCTGTGAG AGCTGCTCAA CAGTGCCCCC TAGGGACTGG TTACTIONCTG ACCCTAACCT      300
CCGGAATCT GCTGTCAAAG GCAGATTCT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:498:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 160 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

```

GAATTAGGGG CTTTTCATC CTTAGGAGAC CTGAGTCCTC AAGAAAACCC TTTTCTGGAA      60
GTATCTGCTC CTTGAGAACA TTTTATAGAA AAGAATAATA CAAAACACAC AACTGCAAGA      120
AATGCCTTTG AAGAAAATGA TTTTATGGAA AACACTCGAG                                     160

```

(2) INFORMATION FOR SEQ ID NO:499:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```

GAATTTCGGCC TTCATGGCCT ACTCGATCTC CTGACCTCGT GGTCCACCCG CCTCGGCCTC      60
CCAAAGTTCT GGGATTACAG ACGTGAGCCA CCGCGCCCGG CTTGTCTCTG GATTTTTTAA      120
CCAAGCACTA TTATTTATAG TTGCGTTAAA ATAAATAGGG ATGGGTTTGA TAAGTCACCA      180
CTTGGTGCTT TAAATTCTGC CATCATCTTT TCTAGGAGTG TAAGATATAG AGATACACAT      240
AAGCAGAAAA TTTTTTTAA CATGAGGATA CTCGAG                                     276

```

(2) INFORMATION FOR SEQ ID NO:500:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```

GAATTTCGGCC TTCTGGCCTA GACCTGCCTC TGATATGTAC TTGGTTTTTA AAAACCCATT      60
TTGTTCTCTC TTGTTTCCTC TCTATTTTCA CCTAGTATCA GAAGGCCAGG CGAGACTGCA      120
ACACTGCTCA TCACCCCGCG GCGTGATCCC TGCTCTTAGG TGCTGGGCAG AGGGGAAGGG      180
TGGTCAGGGT GAGGATGGTG AGGGAGGGCT GGTGAGGGGC TCAGAGGAAT ACTTGAACA      240
ACAGCAGTGT CTCGAG                                     256

```


(2) INFORMATION FOR SEQ ID NO:501:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 635 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```

GAATTCGGCC TTCATGGCCT AGTGGTTTTG TTGTTGTTGT CGGAGACAGG GCCTCGCTTG      60
GTCTCCCAGG CTAGAGTGCA GTGGCATGAT CACGACTCAC TGCAGTCTCG ACCTTCTGGG      120
CTCAAGTGAT CCTCCTGTGT CAGCCTCCCA CACAGCTGGG ACTACAGGCA CATGCCACCA      180
CATCCAGCTA ATTTAAAAAA CATTTTTTTT GTAGAAATAG GGTCTTACCA TGTTGCCCAG      240
GCTAGTCTCA AATTCCGGGG CTCAAGCAAT CCTCCACCT CACCTTCCCA AAGTGCTGGG      300
ATTACAGGCA TGAGTCACCA TACTTGGCCC GAGTGAGCCA AGATTGCACC ACTGCACTCC      360
AGCCTGGGCT ACAGAGCAAG ACACTATCTT AGATCCNNA AGGAAAAAAA AAAAAGAAGG      420
AGAAAGAACC AGAGAAACAT AAGGAAGAGT GAGAGGAAGA AAGAAAGATG CAATTTGGGA      480
AGAAATGAAA AAGAAATGAA TAAAGAATAA AATAATGTAA CGGTCAATAA ATAGGACTTG      540
TGAATGGAGG CCTTTAGGCC AAAGGCTATG ATTAATTTC AAGCTATGTTA CTGAAGTCCA      600
TAAACAAAGG ACTCAGATCT AAATGGGTAC TCGAG                                     635

```

(2) INFORMATION FOR SEQ ID NO:502:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

```

GAATTCGGCC TTCATGGCCT ACCCGTAGAA ATCCCCCTTT CTCTAATAGC GAGGCTCTAA      60
CCACACAGCC TACAATGCTG CGTCTCCCAT CTTAACTCTT TGCCTTTGCC ACCAACTGGC      120
CCTCTTCTTA CTTGATGAGT GTAACAAGAA AGGAGAGTCT TGCAGTGATT AAGGTCTCTC      180
TTTGGACTCT CCCCTCTTAT GTACCTCTTT TAGTCATTTT GCTTCATAGC TGGTTCCTGC      240
TAGAAATGGG AAATGCCTAA GAAGATGACT TCCCAACTGC AAGTCACAAA GGAATGGAGG      300
CTCTAATTGA ATTTTCAAGC ATCTCCTGAG GATCAGAAAG TAATTCTTTC TCAAAGGGTA      360
CTTCCACTGA TGGAAACAAA GTGGAAGGAA AGATGCTCAG GTACAGAGAA GGAATGTCTT      420
TGGTCCTCTT GCCATCTATA GGGGCGCTCG AG                                     452

```

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

```

GAATTCGGCC TTCATGGCCT ACAAATTGT CTTGACATAA GTAATTTGGG TATGCTGTAT      60
AAAGGCTTCT AAGAATTAAG AAACATGGCC CGGTTTGCAA ATTTTAATGC ATGACTACCT      120

```

```

TTTTTCTAT AGAATATAGC TTTTGTGAGA TTCTCAGCAG TGGCTCTGAT CCAGAAAACA      180
TTAAGAACCA CTGGTCATGA GTGGTGATTT TCAGCTTTTT TGGTCTTAAC CCACTTAGGT      240
GGGACAGAAG CTCCTTATCT CACCTATACC ATCCAGCATC CTCGAG                        286

```

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

```

GAATTCAGCC TTCATGGCCT AGAGGGGTTT AGGATTCAAA GCAAAGGGGA GACAGCTACT      60
AAGTAAACTA CAAAATAATT GCTAAACTGA AAATTGTATA AAGTGTACTG GACAGATGAT      120
GTTCTTAATT CTATCCATG AAATATTTTC TGCCTTCTTA GAGGAAATAG CACCTGACAC      180
AACACTAGCC ACATTGTAGG TGATCAATCA GCACATGTCT AAATAAATTA ATTAAAAAAG      240
AATCAATTAG AATTCCACT GAAAATTCCT CTAAATATA ACCAACTTCA TTATGACAAG      300
CTATGAATAT AGAGCTTACA TACATGTTAT ATATCAATAT GTGAGTAGAT AAAGAATGAA      360
TGCCTTAAAT TGTTGGATT TTTATTGTTT TTGTTCTTGT TTTGGAGATG GGGTCTCACT      420
CGAG                                                                424

```

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

```

GAATTACTCA GTTTTCAGGT TCTTCCTAGC TCGGGGCTTT TAAATTTTGA AATCTAAACA      60
TTCTTTCCCA CCATCCTTTT TGACTGTGGA CCTTGGTTTT CTCTTCTAAG TTTCTGTCCC      120
TCTGCTTCCT TACTTTTTTT CCTTTTGTAA TTCTATCTTT ATCTGTCTTT TGTTCACTTT      180
TTAATGCTAT ATATGGATCT CGAG                                          204

```

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGAGA TGTACAGTAA TAAGTATGCA      60
CAGAAATGTT AGATTATTTT TGAAGATGTG GAGAACTAC TGTATTTTTT GCTTATATTC      120
TTCTCTAAAA ATTCACTAAA TGAATAACAG TTATTGGTTT TGCTATTCAA GATAATTATA      180
AAAATATCTA TTATAGCTAA TCTTCACATG AACTCGAG                          218

```

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

```

GAAGTTTAAC ATTTCAACTG TTGGTAAAAT CTCCCTGGTG CCACCTTGTC GCACCCCTCT      60
GTTATGAGGC ACAGTTAGTG GGTTTATGAG AGGTTTGTTT AGTGAAGCTC CTGCCACTGT      120
AGACCTAAAT GTTTCTCTCC CTGTTGAAGT GACCTGCCTT CCTCTTAGT ACCTAACACA      180
GTTGGCAAAG AGCATGGCTA ACTCAAACCC TTTTCTTTGG GGCAGGCTT CCCTTTCTCT      240
CTGGCAGGTA TATTAATAAA TTACAAATA GTAAATTTGC CAAATTTTTC TTGGTGTGTA      300
GCAAGGCATA AAGACTGAAA AATATCTTAT GAATTAGTTC ACTCCCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

```

GAATTCGGCC TTCATGGCCT AAAATGATAC AGTGTGCAGA ACTGGACCCA GTAGGGAATG      60
ATAAAATGTA CAGATGTGCA GAACAGGACT TGGTAGGACT CAGCAGAGAA AACAGGAGGA      120
GAGATGAAAA TGATATGGTG TGCAGAACTG GACTCAGTAA GGTGCGGAAA GGGGAAGGAT      180
TCTGACAGAA TCCAGCACAA AAACAGAGAG GGTGCAGAAA AAGAGATTGG GTCACCTAGA      240
CGTGTGGAGT TGGAGGAGCC TGTGGGAAAT CCAGGATCTC GAG              283

```

(2) INFORMATION FOR SEQ ID NO:509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

```

GAATTCGGCC TCATGGCCTA CTCTCCTTTC TTAAGTTGTG TACTTGGGGG CACTTTTGAT      60
TTTGGTCCCA CATCATTGAG GAAGCTGGCC CAGAGTTCGT CCTCCTTCTT TTTCTGGCA      120
TCCTCTGATC CAATGCCTTT TTCCTGCTCT GCAGCGTCAT CTTCTCCTC ACTACTGCTT      180
CCCTCAGATT CTGAATTGGC ATCCTCCTCT TCCTCTTCTT CTAATGAGAG GCCACCTTGT      240
CTTCTCTTCC TGGCTGGAAT GCTCTGGGCC TTTCTTTTTT TCCCTTGGGT TTTCTGTGTC      300
TGCTCTTCAC CATTAGGCCA TGAAG              325

```

(2) INFORMATION FOR SEQ ID NO:510:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 281 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

GAATTCGGCC	TTCATGGCCT	AGACAGGAGG	TCATTGGGGA	TTTGAAGG	TTACACTGGA	60
TACATTTCCA	TTAAGCTTCA	CGATATCCCA	CAGGTCCATT	CTGTGTGAAA	TGGTCTAAAA	120
ATTTCTGT	CTCATGCTTC	ATTTTTTCT	TTTAGTAATA	TTCTAATTG	TGTAAATAG	180
TATTTCTTT	CATTTATCTT	AATTATGTTA	TATTAAGATA	TCATGTGTAT	GCTTAAATTA	240
TACTTTTGGG	CTTCAATGA	GTGACCCAC	TCAGACTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

GAATTCGGCC	TTCATGGCCT	AATCCCTTG	ACTCAAGACA	GCTAACTTCA	TTTCAGAAC	60
TGTTTAAAC	CTTTGTGTGC	TGGTTATAA	AATAATGTGT	GTAATCCTTG	TTGCTTTCCT	120
GATACCAGAC	TGTTTCCCGT	GGTTGGTTAG	AATATATTTT	GTTTGTATGT	TTATATTGGC	180
ATGTTTAGAT	GTCAAGTTTA	GTCTTCTGAA	GATGAAGTTC	AGCCATTTTG	TATCAACAC	240
CACGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:512:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

GAATTCGGCC	TTCATGGCCT	AATTGATTCT	AATCTTTCCC	AAACAGTGCT	GTGGCAATGT	60
ATGAAAGTAA	TAAAAATAAT	CCTTTTCTG	TTAAAAAAA	AATTGCTGTT	ACTTGCTGTT	120
TTGTTATGCT	TTTGCTGGAG	ATTTTCCAC	CCATCTTAA	GCAGCAACTT	CAGGATGGGG	180
GAATCAAGCA	AAACCATGGT	GAAGAGATTC	ATTTAAAGAG	GACAAGTCTC	GAG	233

(2) INFORMATION FOR SEQ ID NO:513:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

GAATTCGGCC	TTCATGGCCT	AGTCACCTTT	TGTGGGAACT	TCTCTCAGCG	AAGCGGAGCA	60
TGCGAATTTG	ACATCATGAT	TGTCTGAAAA	TTGGTAAGCC	ACTATCCCAG	AAAGAGCTCC	120
CTATGCCCAG	GGCTTGCAAT	GCTAAGAGAA	GGAGGCAGGA	GAGAGACAGG	GAGCGACACT	180
ACATTTGGTG	GGGTGAGGAT	ATGAGGTTCC	TTGGACATCA	TGGCCTCCAG	TGAATATGTG	240
GGTGATGGCT	TGGAACCTAA	GCTTTTTTGC	TAGTGCCCCA	CAAAAGAGTA	CCCTCCACAA	300
CCCATCTGTG	GACCACAGCA	GTGCCTCTCA	ACAAACATGT	GCCCCAAGGA	GTCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

GAATTCGGCC	TTCATGGCCT	AGAATAGAGG	AAAATAGCCG	CCTGGTGGCT	AGACAATTTA	60
GGTGTAGAAA	ACACATTTAT	ATGGTTCTTT	GAATGTAACA	GTGGTAAAGA	ATATAGGTTT	120
AGTTGTTGCT	GCTAAGTAGG	GGGAAATGAC	ATTTTTATCT	GGTATGTTTG	AGAATAAAGT	180
AAATTTCAAA	ATTTGAGATG	ATCGAAGTTT	TTATTTATAA	ACTTAAGTAT	TATTATAATA	240
TGTTACATAT	TTTATCTTTT	AAAAATTGTA	ATTCAGAGAG	TGTAACAAAA	TGTACTTCCT	300
CACCTTCTTG	CTTTTGTGTT	CCCAGAAGTA	ACTCGAG			337

(2) INFORMATION FOR SEQ ID NO:515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

GAAAAGATGG	AAGAAAACCA	CCATAGCACT	GCAGAAGAAC	TACAGGCTAC	TCTACAAGAA	60
TTATCAGACC	AGCAACAAAT	GGTACAGGAA	TTGACAGCTG	AAAATGAGAA	GCTGGTGGAT	120
GAAAAGACGA	TTTTAGAGAC	ATCCTTTCAT	CAGCATCGAG	AGAGGGCAGA	GCAGCTAAGT	180
CAAGAAAATG	AGAAGCTGAT	GAATCTTTTA	CAAGAGCGAG	TAAAGAATGA	AGAGCCCACC	240
ACTCAGGAAG	GAAAAATTAT	TGAACTGGAG	CAGAAGTGCA	CAGGTATTCT	TGAACAGGGC	300
CGCTTTGAAA	GAGAGAAGCT	ACTCAACATT	CAGCAGCAGT	TGACCTGTAG	CTTGCGGAGA	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

CGGAGTGAGC	CGGGGTAGCA	TCACCTCACT	CCAGCCTAGG	TGATGACAGA	GTTAGATTTT	60
GTCTCAAAAA	AGAAAAAGAA	AACAATTCCA	GGATTATTAT	TTCTACGTAA	ATGTGACATA	120
TTATTCTAT	GATATTATTT	CTTTGATCTC	GTAGCCACAC	TGTTCCCAAT	AATGATTATG	180
AGAAAAAGTA	CCCTCTGTTT	GAAGGCAATC	ATGGGGAAAA	TATAATTCAC	AAAGTATTTT	240
AAAATTAAAA	TCCTGTGTAT	TTCAAAAGAC	GATGGTCCTA	TTTTAAGAAA	AATAACCTTG	300
CAATTCATTT	GCTTTTTCAT	TGGCTCGAG				329

(2) INFORMATION FOR SEQ ID NO:517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

GAATTCGGCC	TTCATGGCCT	AGTCCTTTCA	AGTACACAGA	GAAATTTTGC	TTGAATTTCT	60
GGAGGAAGAG	TCCAGGGTTC	GGGAAAAGGG	ACTGGGTGGT	ATCTATCTGG	GGCCCCAGAC	120
AGCGGCACTT	CTTCTTCTG	TGCTGGAATT	CGGCGAACAA	TCATATCATC	TTTTTCCAAA	180
TCCGGAAGTA	CAAGTTCACC	TTCTCTACAC	TGTAAAATTA	TATCTCGCTC	TACAGAATCA	240
TCTTGCTCAG	AGAACTTTCT	AAAGTCTTCA	AAAGCTCGGA	GAACATATGG	ATTTGTCATGG	300
AAAGCCCCAG	TCTTCTGAC	AAAGAAATCA	TCATTCTCTA	AGTCAGGATC	CAGGGCTGCC	360
ATCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

GAATTCGGCC	TTCATGGCCT	ACGCTGAGAT	CAAGATTCGG	AGTTGGGGCT	GCCTAATAGC	60
TGCAATGATA	CTGTTGTCCT	CACTCACCGT	GCACCCCATC	TTGAGGCTTA	TCATCACCAT	120
GGAGATATCC	TTCTTCAGCT	TCTTCATCTT	ACTGTACAGC	TTTGCCATTC	ATAGATACAT	180
ACCCCTTCATC	CTGTGGCCCA	TTTCTGACCT	CTTCAACGAC	CTGATTGCTT	GTGCGTTCCT	240
TGTGGGAGCC	GTGGTCTTTG	CTGTGAGAAG	TCGGCGATCC	ATGAATCTCC	ACTACTTACT	300
TGCTGTGATC	CTTATTGGTG	CGGCTGGAGT	TTTTGCTTTT	ATCGATGTGT	GTCTTCAAAG	360
AAACCACTTC	AGAGGCAAGA	AGGCCAAAAA	GCTCGAG			397

(2) INFORMATION FOR SEQ ID NO:519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 640 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

GAATTCGGCC	TTCATGCCTA	CTTTGGTAAC	AGAAGAGAAG	ACTGTGGAGC	CAGCTACCGT	60
CTCAGAAGAA	GCAAAGCCTG	CATCTGAACC	TGCTCCTGCC	CCTGTGGAAC	AGCTGGAACA	120
AGTAGACCTG	CCCCCAGGAG	CAGACCCCGA	TAAAGAAGCT	GCCATGATGC	CTGCGGGTGT	180
TGAGGAAGGT	TCATCAGGTG	ACCAGCCGCC	TTATCTGGAT	GCCAAGCCTC	CAACTCCCGG	240
GGCCTCGTTT	TCCCAGGCAG	AGAGCAACGT	AGATCCAGAG	CCTGACAGTA	CCCAGCCACT	300
TTCAAAACCA	GCTCAGAACT	CTGAGGAAGC	CAATGAGCCA	AAGGCCGAAA	AGCCAGACGC	360
CACTGCAGAT	GCTGAGCCTG	ATGCAAACCA	GAAAGCCGAA	GCTGCTCCTG	AGTCTCAGCC	420
CCCAGCTTCT	GAAGATTTAG	AGGTTGATCC	TCCAGTTGCT	GCAAAGGATA	AAAAGCCAAA	480
CAAAAGCAAG	CGTTCAAAGA	CCCCTGTTCA	GGCAGCTGCA	GTGAGTATCG	TGGAGAAGCC	540
CGTCACAAGG	AAGAGTGAGA	GGATAGACCG	GGAAAACTC	AAGCGGTCCA	ATTCTCCTCG	600
GGGAGAAGCA	CAGAAGCCTT	TGGAATTAAA	GACACTCGAG			640

(2) INFORMATION FOR SEQ ID NO:520:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 469 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

GAATTCGGCC	TTCATGGCCT	AGCAAGAGAA	AGAGAAGTGC	AAACACTCCC	ACGGCGAAGC	60
GCCCTCCGTG	GACGCGGATC	CCAAGTTACC	CAGTAGCAAG	GAGAAGCCCA	CTCACTGCTC	120
CGAGTGCGGC	AAAGCTTTCA	GAACCTACCA	CCAGCTGGTC	TTGCACTCCA	GGGTCCACAA	180
GAAGGACCGG	AGGGCCGGCG	CGGAGTCGCC	CACCATGTCT	GTGGACGGGA	GGCAGCCGGG	240
GACGTGTTCT	CCTGACCTCG	CCGCCCCTCT	GGATGAAAAT	GGAGCCGTGG	ATCGAGGGGA	300
AGGTGTTTCT	GAAGACGGAT	CTGAGGATGG	GCTTCCCGAA	GGAATCCATC	TGGATAAAAA	360
TGATGATGGA	GGAAAAATAA	AACATCTTAC	ATCTTCAAGA	GAGTGTAGTT	ATTGTGGAAA	420
GTTTTTCCGT	TCAAATTATT	ACCTCAATAT	TCATCTCAGA	ACGCTCGAG		469

(2) INFORMATION FOR SEQ ID NO:521:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 202 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

GAATTCGGCC	TTCATGGCCT	ACCCGTTTCC	TCTAGTTTCT	TCCTGTAGTA	CTCCTCTTTT	60
AGATCCTAAG	TCTCTTACAA	AAGCTTTGAA	TACTGTGAAA	ATGTTTTACA	TTCCATTTC	120
TTTGTGTTGT	TTTTTTAACT	GCATTTTACC	AGATGTTTTG	ATGTTATCGC	TTATGTTAAT	180
AGTAATTCCC	GCGGCCTTCA	TG				202

(2) INFORMATION FOR SEQ ID NO:522:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 492 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

GAATTCGGCC	TTCATGGCCT	AAATTTAATG	AAGCAAAATT	CCATACATCA	TTTTGAAAAT	60
AGTGTTTCTT	TCCCTGATAG	GCCTGTTCTG	CATCATTCTT	TTAGCTTCCT	TCTGCCCTGT	120
TTATCACTTG	GTCCCACTTT	TATATTTTTC	CTCTTCGGTC	CAGAATTTCT	TATTTAGTTT	180
CTTGATTTT	GCCTACTCCC	TCCCTTCTCC	ATGATTCAGC	CTAGTCTTTC	CGTCCTCTGT	240
GGACTTGGGT	GTGCCTTCCT	CTGGGCCACC	TCGTCTTTTG	CTGCTGTTAG	CCCTCCCGCC	300
TGCGCACCTG	CCACTTCACC	CTCGCCTGTG	GTCCACTTAC	GTTCCACTCA	GCCCCGGTCAG	360
TCCTGCTTTG	TTCTTCTCCA	CCGCCTTGGT	CTCCCGTGTG	TCTTATCTAG	CTCTGGTTCC	420
TTCTCGTCTC	CACATTTATT	TTGTTTCTT	CCTGTGCTTG	TTAGTCCTTG	TGCACTTGGC	480
CCTTTTCTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

GAATTCGGCC	TTCATGCCTA	GGAAATTTCA	CCATTGCGTC	TCCCCCTTTG	TGGGTCAGCA	60
GGTGGTCAAG	ACAGGGGGCA	GCAGTAAGAA	GCTACAGCCC	GCCAGCCTGC	AGTCTCTGTG	120
GCTCCAGGAC	ACCCAGGTCC	ATGGAAGAA	ATTATTCCTT	AGATTTGATC	TAGATGAAGA	180
AATGGGGCCC	CCTGGCAGCA	GCCCAACACC	AGAGCCTCCA	CAAAAGAGAG	TGCAGAAGGA	240
AGGGGTGCG	GACCCAAAGC	AGGTGGGGGA	GCCCAGCGGG	CAGAAGACCC	TTGATGGATC	300
CTCACGGTCT	GCAGAGCTCG	TCCCCCAGGG	CGAGGATGAT	TCTGAGTATT	TGGAGAGAGA	360
CGCCCCTGCA	GGAGATGCTG	GGAGGTGGCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

CGATTGAATT	CTAGACCTGA	CCAAAGACCT	TCCGTACAGA	TTGACCGCAG	AATGTCAGGG	60
AAAGTTAGGA	GAAGAAGTTC	TGAGAAGACT	GACTACAGAT	TGGCTGGCCT	GGCTGACCCA	120
GGAACCTTCTG	AGCAGACTGA	CCTCAGATTG	TATGGCCTCG	TTGACCACAA	AACATCTGTA	180
AAGACTCACCC	ACCAAGTGTA	CGGCCAAGCC	ACTGAACTAG	CTGAACACCA	GGCTATTGAC	240
CAAGCTCATA	GTAATGCTGA	TCAACCTCCA	GTTGACAATG	CTCACTACAC	TGAATCTGAC	300
CAGACTGACC	ACTTAGCAGA	CAGACAAGCT	AATCATAAAG	ACCAGCTGTC	TTACTATGAA	360
ACACGTGGCC	AGTCTGAAGA	CAGAATATTT	CCCCAGTTAG	GCAACAGCAA	AGAGGACAAA	420
GAGGCTGACT	ACAGAGTACA	ACCCTGCAAA	TTTGAGGATA	GCCAAGTAGA	CCTCAATTCC	480
AAGCCTTCAG	TTGAAATGGA	AACTCAGAAT	GCAACCACTA	TCCCACCCTA	CAACCCAGTT	540
GATGCCAGAT	TCACCAGTAA	ATTCCAAGCA	AAAGACCAAG	CTCTTTTCCC	AAGACTCGAG	600

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

GAATTCGGCC	TTCATGGCCT	ACTTTCTTCT	GCTGGCTTCC	ATCTTGCCAC	ACTTTCTTGC	60
TCTTCCTTCT	AACTGAAAGA	CTACTTCTCC	ATCCCCTCTG	CAGGCTCTTT	TGCTCCACCT	120
GATATTTAAA	TGTTGGAATG	CCTAGAGTTG	TTCTGACCCT	TCTTTATCTA	CCCCGATTTC	180
CTCAGTGATC	TTATGCAGAG	GTCTCCCAAA	GTTTACATGG	CTATCCTTGA	CCTCCTTCCT	240
GAATGTCAGC	TGGTGTGAGC	TGCCGTCAC	TGGATGTTTA	ATCAGCAACT	CAAGGTTTAC	300
GTGATGATTA	GACCGCAGTT	ACCCCCAGAC	TTCTTATCC	CTTAGTTTTC	CCCATCTCAT	360
TAAGTTCAC	TCCATTCACC	TTCTTGATGA	AGCCAAGTAT	TTCAGAACTA	GCCTTGTTTC	420
TTCTTTTTC	CTTTCCTTCA	TATCAATTCC	AGACTACCCA	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 559 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

GAATTCGGCC	TTCATGGCCT	ACATTGTAGA	AGAGATCACA	GAAACCACAA	AAGGTTTTCT	60
GAAGTATATG	GATAATCAAT	CATTGCAAC	TGAAAGTCAG	GAAGGAGTTG	GTTTGGGACA	120
TTCACCTTCA	TCCTATGTGA	ATACTAAGGA	AATGCTAACC	ACCAATCCAA	AGACTGAGAA	180
ATTTGAAGCA	GACACAGACC	ACAGGACAAC	TTCTTTTCCT	GGTGCTGAGT	CCACAGCAGG	240
CAGTGAGCCT	GGAAGCCTCA	CCCCTGATAA	GGAGAAGCCT	TCGCAGATGA	CAGCTGATAA	300
CACCCAGGCT	GCTGCCACCA	AGCAACCACT	CGAAACTTCC	GAGTACACCC	TGAGTGTGTA	360
GCCAGAAACT	GATAGTCTGC	TGGGAGCCCC	AGAAGTCACA	GTGAGTGTCA	GCACAGCTGT	420
TCCAGCTGCC	TCTGCCTTAA	GTGATGAGTG	GGATGACACC	AAATTAGAGA	GTGTAAGCCG	480
GATAAGGACC	CCCAAGCTTG	GAGACAATGA	AGAGACTCAG	GTGAGAACGG	AGATGTCTCA	540
GACAGCACAA	GGCCTCGAG					559

(2) INFORMATION FOR SEQ ID NO:527:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 318 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

GAATTCGGCC	TTCATGGCCT	ACGAGTGGT	TCAATTTTCT	TCGAAACGGT	GTGGTCCCTG	60
CAAAAGGATG	TTTCCTGTTT	TCCATGAGCT	GGCTGAAACT	TGTCACATCA	AAACAATACC	120
CACATTTTCA	ATGTTCAAGA	AAAGCCAGAA	GGTAACCCTA	TTCTCAAGAA	TCAAAAGAAT	180
AATTTGCTGT	TATAGAAGTG	GATTCATGAG	CAACCTGATT	TTTGAGTTTT	GTGGAGCCGA	240
TGCTAAAAAA	TTGGAAGCCA	AGACTCAAGA	ATTAATGTAA	GCTGATCTCC	AAGGCAAAAT	300
ACACTTGTGC	CGCTCGAG					318

(2) INFORMATION FOR SEQ ID NO:528:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

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GGCACAGACT TACCGGACAC ACAGGTCATG GGACACAGAG TCATGGGGCA CACAGGTTCA      60
CAGGGCACAC AGGCTCACGG GACACAGAGT CATGGGACAC ACAGGCTCAC AGGGCACACA      120
GGCTCACAGG ACACACAGGT TCATGGGGCA CAGAGTCATG GGGCACAGAC TCACAGACTC      180
ACAGGTCATA GACGCTCATG GGGCGCAGGC TCACAGGGCA CACAGACTCA GGGCACACAG      240
GCTCATGGGG CACAGAGTCA TGGGGCAGGG CTCGAG      276

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(2) INFORMATION FOR SEQ ID NO:529:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 180 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

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GAATTCGGCC TTCATGGCCT ATTCTGTTCT TTAAATTTGA ATGAAAGTTT GGCATTTTAA      60
AAAACTTTAG GTGATTTAGG AGTATAATTT TAAGCAGATT TTAGAGTAC GAGTGTCCAC      120
ATATTTAACT AAACATTCAA AAATTAGTTA AAATCAATGA ACTTGGGAAG GATCCTCGAG      180

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(2) INFORMATION FOR SEQ ID NO:530:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 470 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

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GGGGACAGAA GATGTGCTCC AGGGTCCCTC TGCTGCTGCC GCTGCTCCTG CTA CTGGCCC      60
TGGGGCCTGG GGTGCAGGGC TGCCCATCCG GCTGCCAGTG CAGCCAGCCA CAGACAGTCT      120
TCTGCACTGC CCGCCAGGGG ACCACGGTGC CCCGAGACGT GCCACCCGAC ACGGTGGGGC      180
TGTACGTCTT TGAGAACGGC ATCACCATGC TCGACGCAGG CAGCTTTGCC GGCCTGCCGG      240
GCCTGCAGCT CCTGGACCTG TCACAGAACC AGATCGCCAG CCTGCCCAGC GGGGTCTTCC      300
AGCCACTCGC CAACCTCAGC AACCTGGACC TGACGGCCAA CAGGCTGCAT GAAATCACCA      360
ACGAGACCCA GGCCCTTCAG CACCGTTCAC AGTATTTTGA AGGTGTTGTG AAGTGAATA      420
AGCTGGAAAT ACTGGAGACC ATCGTGGACA GAATAGTAAG AGCCCTCGAG      470

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(2) INFORMATION FOR SEQ ID NO:531:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 553 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

GAATTCGGCC	TTCATGGCCT	AGAAAATTC	AGAAAGGATA	TTTAAGAAAA	TACAATAAAC	60
TATTGGAAAG	TACTCCCCTA	ACCTCTTTT	TGCATCATCT	GATAGATACTA	GCTATCTAGG	120
TGGAGTTGAA	AGAGTTAAGA	ATGTCGATTA	AAATCACTCT	CAGTGCTTCN	TACTATTAAG	180
CAGTAAAAAC	TGTTCTCTAT	TAGACTTTAG	AAATAAATGT	ACCTGATGTA	CCTGATGCTA	240
TGGTCAGGTT	ATACTCCTCC	TCCCCCAGCT	ATCTATATGG	AATTGCTTAC	CAAAGGATAG	300
TGCGATGTTT	CAGGAGGCTG	GAGGAAGGGG	GGTTCAGTG	GAGAGGGACA	GCCCACTGAG	360
AAGTCAAACA	TTTCAAAGTT	TGGATTGTAT	CAAGTGGCAT	GTGCTGTGAC	CATTATAAAT	420
GTTAGTAGAA	ATTTTACAAT	AGGTGCTTAT	TCTCAAAGCA	GGAATTGGTG	GCAGATTTTA	480
CAAAAGATGT	ATCCTTCCAA	TTTGAATCT	TCTCTTTGAC	AATTCCTAGA	TAAAAAGATG	540
GCCTTTGCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 843 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

GAATTCGGCC	AGAGAGGCCT	ACTTCTCTTA	GTGATTTTCAT	GTTTCAACCA	GTACATTGTG	60
GTGAATACTG	AAATATCTTG	TTTAATTCAG	ATAATTAATA	TGGTGGCAAA	GGAAGCTGTT	120
TAGCCAGAGC	CCTTCTTGAC	TTTGAGGAAC	AGTGGTAGTA	TAAGACTTGA	AGACAGACGT	180
GTAAAAAGTA	CTACTCACTG	GTAGGCTCAG	GTCTGGTTGA	TTGACTGATT	CTTGAGACGG	240
AATGTCGCTC	TGTCGCCTAG	GCAGGAGTGC	AGTGCCCCAG	TCTCGGCTCA	CTGCAGCCTC	300
CGTCTCCGGG	TCCAAGCGAT	TCTCCTGCCT	CAGCCTCCCG	AGTAGCTGGG	ACTACAGGCG	360
CCCCCACCA	CACCGGGCTA	ATTTTTGTAT	TTTTAGTAGA	GACGGAGTTT	CACAATATTG	420
GTCTCGAACT	CCTGACCTCA	GGTGATCCAC	TCGCCTGGCC	CACCCAAAGT	GCTGGGATTA	480
CAGGGATGAG	CCCCTGCGCC	TGGCCTCGGT	TGAATTTATT	AAACAACCTT	TGTGGGCAGC	540
AAGCTGTACG	AGGTAACTA	TGTGATGAGA	AGACTTAGAA	ATGGAGAAAA	GTTTTATCAG	600
TTCTACATAG	GACTTAGTTT	GGGAGTTTCT	GGAAACTACG	TTGGAAATCA	GTAGTTGCAC	660
ACTAGCTGAA	TTCAGCTGTG	TAATTTACAG	TGATTTGTTA	TTTACCAAAT	AAGTAGAAGA	720
GGGAATTAAG	AAGCTAAAAT	CTCTGGGTAC	TTGTTTGATA	TGAATTTGTT	AATTGTTTAT	780
ACTCAGGTAA	TAAGTGTTAC	CTCAGTCATA	GCATTTAATA	TTTTATCTGA	CTGTCTCTC	840
GAG						843

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 525 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

GAATTCGGCC	AAAGAGGCCT	ACATCCAGAA	ATTAGGGAC	TCAGCCCTGG	TCAGGGTGGC	60
AAAGGGTCTG	TTGTCTTTC	CCCATTAGAC	AGAGGTCTTG	TCCTGCTACC	CTAATTGTAA	120
AGGGGTGCCT	GGGAAGGGGT	GGTAGGGACA	TGGTGGCGGT	GGAGACTCCG	GCCCCACTTC	180
TCCAGGCTTT	GCTGACAGGG	GCCTGCTTTT	AATTTTATT	TTTATTCCAT	GACTTTTTAA	240
AAAAGAATCC	CGTAACTTCT	TTTTTCATAAC	TTTTTTTGTA	ACTTTTCATA	ATACTGTTTT	300
CTACTTGTG	CCACAAGTT	TTTTTGCCAC	AACGTTTTTA	CATTTTTTAT	CCCATAACTT	360
TTTCACCCCA	TAACTTTTTT	AAATAAAGTT	ATTTAATAAA	ATAACTTTTT	ATAAAAACCTT	420
AATAAAAGTT	TTTAAATTAA	CCATAAC'T	TTTTATTTTG	GTTTTTAATA	AACACTTGCA	480
TAGTTATATT	ACAACCTTGT	AAAAATGAAA	CACATTATCT	CAGGC		525

(2) INFORMATION FOR SEQ ID NO:534:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

GAATTCGGCC	AAAGAGGCCT	AGAAAACCCT	TGAAGACATG	TTGAAAATAC	ATACTCCTGT	60
TAGCCAAGAA	GAAAGATTGA	TTTTCTTAGA	CTCCATTAAG	TCCAAATCCA	AAGACTCTGT	120
GTGGGAAAAA	GAAATAGAAA	TACTTATAGA	GGAAAATGAG	GACCTCAAAC	AACATGTAT	180
TCAGCTAAAT	GAAGAGATTG	AAAAGCAAAG	GAACACTTTT	TCATTTGCTG	AAAAAACTT	240
TGAAGTTAAC	TATCAAGAGT	TACAAGAG				268

(2) INFORMATION FOR SEQ ID NO:535:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

GGCTTGCACC	TCGGCGATCC	CGACTCCCT	TCTTTATGGC	GTGCTCCTG	TGCTGTGGGC	60
CGAAGCTGGC	CGCTGCGGC	ATCGTCCTCA	GCGCTGGGG	AGTGATCATG	TTGATAATGC	120
TCGGAATATT	TTTCAATGTC	CATTCCGCTG	TGTTGATTGA	GGACGTTCCC	TTCACGGAGA	180
AAGATTTTGA	GAATGGCCCC	CAGAACATAG	ACATTCCTCT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:536:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

GAATTCGGCC	TTTATGGCCT	ACCACTCTGG	CCCCAGCGTC	ACTGGCCTAG	GGACACATGG	60
GGGTGGGGAT	TGTTTGGCCT	TCTGGCTTA	GGTCTCTGGA	AGAGAGAAGA	ACCCCATGGG	120

GCAGACCCAG	GCCACGGGCA	GTACATGCCT	CCCACACTAC	TGACACCGCC	AGTGTCTTCT	180
GTGAAGCCAC	CTTTGAGCAA	CGGAAAGGAA	GGGGGATGGG	CAAGATCAGT	GCAAGGTTGG	240
CCAAAAGCCT	GGGGCTGGCC	TTCTGCTGGC	ATGAGAGGGC	CAGGCCGCCC	CCAGTCTCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:537:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

GAATTCGGCC	TTCATGGCCT	AGAACAAAAT	CTGAAATTCA	GAAATAAACA	ACAGTTGGAA	60
AATATTTTCC	ATTTTTTTCC	CTATTAAATA	TGATAATTTT	AGGTGCAAAG	AGTGTTTTTT	120
TTTTTTTTTT	TTTCTCCACA	GTGCTTTTCA	GGTGGGGAC	TAATGGATAT	AGAGGGTGGG	180
AGGCCAGAAT	AACCAAGTAC	CTGGAAGTGA	ATCTTTGTGG	AGATAATGAA	ATAATTTTAT	240
TCGAAAGGTG	CAAAGGAAG	TCTTCCATCA	CTAGCTCAGC	TGTTATGGTC	CTTGAAGTGC	300
CCTTGCCCGT	CTGTCTTTTT	ATTAATCCTT	TTTACCTGTC	GAGTCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:538:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

GAATTCGGCC	TTCATGGCCT	AGAGTTGCAC	AGATGTCTTT	TGTTAGCTTT	GGTGGCGGAG	60
TCATCCTCAC	AGACCGTTAC	TCAGATAATT	AAGTGCCTTG	CAAATTTAGT	ATCAAATGCA	120
CCTTATGATC	GTCTAAAACT	CAGCCTGCTG	ACCAAAGTCT	GGAACCAGAT	AAAGCCTTAT	180
ATTCGCCACA	AAGATGTAA	TGTTCTGTG	TCAAGTCTCA	CACTCTTGGG	AGCTATAGTG	240
TCCACCCACG	CACCTTACC	TGAAGTCCAA	CTACTTCTGC	AACAGCCATG	TTCTTCTGGA	300
CTCGGTAATA	GCAATTCAGC	AACCCCTCAC	CTCAGCCCCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:539:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

GAATTCGGCC	TTCATGGCCT	ACAACTCCAT	TAAACCACCA	CCAGTCCCC	AAGCCACCCC	60
TTCAGCCATG	AAGTTCCTGC	TCCTGGTCTT	GGCAGCCCTC	GGATTCTCTGA	CCCAGGTGAT	120
CCCAGCCAGT	GCAGGTGGGT	CAAAATGTGT	GAGTAACACC	CCAGGATACT	GCAGGACATG	180
TTGCCACTGG	GGGGAGACAG	CATTGTTTCT	GTGCAACGCT	TCCAGAAAAT	GCTGCATCAG	240

CTACTCCTTC CTGCCGAAGC CTGACCTACC ACAGCTCATC GGTAACCACT GGCAATCAAG 300
GAGAAGAAAC ACACAAAGGA AAGACAAGAA GCAACCCCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:540:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 248 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GCGATTGAAT TCTGAAGACC TCTCAGCCTC TTATGACCAC TCCTGGCACC CTGTCAAGCA 60
 CAGCATCTCT GGTCACTGGC CCTATAGCCG TACAGACTAC ACCTGGA AAA CAGCTCTCGC 120
 TGACCCATCC TGAAATACTA GTTCCTCAAA TCTCAACAGA AGGTGGCATC AGCACAGAAA 180
 GGAACCGAGT GATTGTGGAT GCTACCACTG GATTGATCCC TTTGACCACT GTACCCACAA 240
 ATCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:541:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 433 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

GAATTGGCCT TCATGGCCTA GATTGTCTTT ATAGGAAATG TCTTTAGCAA AATACTACGG 60
 GTTCTATAAA ACCCATTAAC GGGTTATCAG TGTCTAGGAC ATAAATGGCT TCTGGTAAGA 120
 AAATTAAGGT CTACTCTCCC TAAATACTAT CATAATTACA AAGGTTAAGA AAAAAGAACT 180
 AGAGTAAAC ATGTGTCCCT TAAAAATCAA ACATGAGTGG TCACAAGGTC CTAAGAAGCA 240
 GAGAATGAGA ACTCCAGTTG CTTGTTTATC TCTCAGGCTG AGCATGGTTG GTTACAATGA 300
 GGGGTAGCAG GAAGAGCACA GCCTTGGACT CCAGTCCAAG GAACTCCAGT CTCTCCTGCA 360
 ATTTCCAGT GTTTGACCTT GGGCCACTTA CTGTTCTTT CTCAGCCTCC ATTTTCATAT 420
 CTAAAACCTC GAG 433

(2) INFORMATION FOR SEQ ID NO:542:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 493 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

GAATTCGGCC TTCTAGGCCT AGACACGGGA CATAAAACT TTTAATGAAG GAGGACACAG 60
 CTCAGAGCCC TTCCACATGC GGCCCAACCC TGCCCCACGG AGACCGGCCA TGGCAACCGC 120
 TCAATCAGAA GGTGTTCTTG ATGCGGCCGG CCACAGCCT AAGGATGTCC CCGATCTTCT 180
 TCTGCCAGTT GCGATGTCC TTGGACACGG CGCACCACAG CTCCCCATGC CGAGGCTCTG 240
 CACTCTACA GCGCTTCCTC ACCTCCTCCT GCTGCTCCTC AGTGCCATGC TGCAGCTCAA 300

```

ACTTGTAGAA GAAGGCCAG GCATCCCCCA GGTCCGAGTC AATCTTCACA GTGCGGTGGA      360
ACCACTCCCT GGCCTTGGTG ATCTTCCGCT GACTCCAAAA CAGCTTGGCC ACGGCCAGGA      420
GCACATGGGG GTCATGCTCA CACTTCTTCA GGGCATCCAC GCTCTTGGTC CTCCTCTGGG      480
GCCTTGCCTC GAG                                         493

```

(2) INFORMATION FOR SEQ ID NO:543:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

```

GAATTCGGCC TTCATGGCCT AGTCAGGGAG AAGGGAAGGT GAGAAGGGGG GAAAAAAGA      60
AGCAAAAAGC CCAAAGAAAA AAACATTTTA TATTCATCTG TATAAACATA TCCGCTAAGG      120
CAAACGCAAT CCGGGTCCGA GGCTGCTGCG CTGGGCTCGG TGCCTCCTAA TTTCTGCAGA      180
TTCTAAGGCC AAAAATAAAA ACCTCTGCAA GTCCGCGTAG CTCCAGGAC TCCTGGGCAT      240
TTTACTAAAA TAAAGAGTTA TCGAGTTTAA AAAGCAGTGA CGTCGTTATG ACACACACTG      300
AAAGTTGCAT AACTGTGGCC TCGAG                                         325

```

(2) INFORMATION FOR SEQ ID NO:544:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 473 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

```

GAATTCGGCC AAAGAGGCCT AAGAATTCCT TATGAAAGTG ATGCTTGAGT CAAAATATGA      60
TGGATGAAGA GAGTTTAAAT AGATTACATA GAATTTTAA TAATGTCGAT TGGTTATATA      120
CTGGGCACTG ATAGCTGATT TTTCTTTGGG GAAAGGTATG TCAGCCTAGT CATTGAGATT      180
CCTTTATTTT TTTAAATGTT TTTTCATTTT TTGCTTTGCA TTGCATTCAT TTGCTGAAGA      240
GCTGGCTTGT ACTTTGGCAG GTGTCATACT TGGTTATTCT CCTTAGGATA TTGGCCCAAC      300
AATCTGGGAT TTGTGAAAGG CGCTTCGCTT TTCAGACCTG GGCGTCTGTA TCATGACTAT      360
CATAAATTTA GGATTAAGAC ACCTAGCCTC CTACCAGGAT GAATGAGGTG TCCATGTGAC      420
CTGCTGTGCC CTGGAATTTT ATACATCTTT CTCTCATAGC ACACGGACTC GAG          473

```

(2) INFORMATION FOR SEQ ID NO:545:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 120 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGAAG GAAGAGGGAA GAAGAAAAAC TATAAAAGTG      60
TGCTAAATGT TTTATTTTCT CTGGAAGAAT AGTTATATTC TACTCTTTGT GGCTCTCGAG      120

```

(2) INFORMATION FOR SEQ ID NO:546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

```

GCTAGACCTG CCCCCTTAGA AATGGAAAAA GCATGCAAGA GAGATGTTAA AGGAGACTAT      60
TGGAGCAACT GTGTCCACAC CCTCTGTGAT AGAAATGGAA AAAATATCCC CAGAAGATCG      120
TGGTGAGAAAT ATTGGGAAAC ACAAAGTGTT ACCCGCAGTG GTAGACATTG AGAAAATACA      180
TGGAACAGGA CTAGAATTGA CCACTAAACA AGGGGAGGCC ATGCTTCCTG CATTTGAAAG      240
TAAAACACCA CAAGAGTATG CTGAAGGGAG TGTGGAAGAA ACAATGGAAA ATACTTACCA      300
AAAGGATGCT GAAGGGGATA TTGGAAGGC TGAAGTGATG CCTGTGAGGT TAGAAATGGA      360
AAATACTTAC CCAAAGGATA CTGAAAGAGA CGGTGGCAAA ACTGAGGTGA TGCCCTTGC      420
ATTAGAGGTA GTAAATACTT ACCAAAAAAA TGCCAAAGGT TTTACCGGGA ACAATCTCGA      480
G

```

(2) INFORMATION FOR SEQ ID NO:547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

```

GAATTCGGCC AAAGAGGCCT AGAAACCTGA GGCTGCTGCC CTTTATCTGC CTTACGGTA      60
CTGTCCCCTT CCCCAGCTC CTCCTGACC CCATGGGCCA GGCCTCAGAC CTTCCAGCTA      120
ACCGCTTCCC ATGAGCCACT ACTCTGATGT CAGCCTATAA CCAAAGGAGC TGGGGGGTCC      180
AGGCCTGGTG ACCAACCTTT CTCAGCCAC TCAATCAGGG TGCTCCCCAC CTGCAGGCAG      240
GAGGCAACAC CCTATCTGCT ACCATCAGCC CTTCCAGAG CCCATCTGCC CCGCCCAGCC      300
CTGCCCTGCC CAGCCATACC CTGCTCTGCC CCATCTGGGG GTGCCCTGCT CAGGGATGGG      360
CTGGCAGGGC TGTACCCAGC CTCCTGGTA AGCAAAGAGC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:548:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

```

GCGATTGAAT TCTAGACCTG CCTCCCTGCT TTCTAATAAA TCTGACTAAC CTTAGACATT      60
TTGTATCTTA CTAAGAACAT CCCTTCAATA TCTACTTCAT TATCCCATGC CATTTCCTCA      120
CTGTCTCAAC ACGAATCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:549:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 296 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

```
GAATTCGGCC TTCATGGCCT ACTATGGTAT TGCTAAACAA GGTGGGAGG AGAGAGAGGT    60
AATCAGGGAG GACTTCCCAC AGGAGGTGGC ATCTGCAGAT GTCTCAAAA AGAAAAGAAT    120
TAGCCTGGCA AGAGGTGAGG ATTGTGTAGA GGTCACTCAC TTTCCTTGTG GGTGGAGGAA    180
ACCATTCAG GAGCTGTAGG AAGCTTGGTG CTGGTGAAGG AGGCAGGAGA GGAGAGAAGA    240
GGAGATGACC TTAGAAATCA CATCCAAGAG CCTCTGATCC CAGGAGGCAG CTCGAG      296
```

(2) INFORMATION FOR SEQ ID NO:550:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 254 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

```
GCAGGAGAGA AAATTGAGGC TTAGGTTAAG AAAGTCAAC AATTTAATTG    60
GTTTGGGAAG ACCAGGAAGA CTTAAGTTC CTAAGATCGT TTGAGATTCT GCATCAGGGA    120
ACACTTGACA GCAGGTTTAT ACAAGACAG ATTGGTATC TTGGAGGGA ATGAGTTTCC    180
AGTCATTGCA GGTGTCCAG CAGAGAGGCG CACTCTCCTT TTTTCTTTC TTTACTCCCT    240
TTTTGATTCT CGAG      254
```

(2) INFORMATION FOR SEQ ID NO:551:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

```
AGGCCATGAA GGCCCTTCC ATTTCTTTT GTTCCATCAC TCTTCTCTCA ACCTGTGTTT    60
CTTTTTTTAC TGAGGAGTTA GTCCCCATTA GTTCTTGTAT CACATTTTCA TTGCACGAC    120
ATTACTCGCA GGTGGTGGGG AGCCTGGGCT TTTGGGGAAC CAGGCTGCTC TGGTCCCCAG    180
CATTGCCTCC TCCTAGCCCC TCTAGTCCAG TTGCCTCCC TTACCCTCAT TTCCAAACC    240
TCTTGATACC TCCTCTCCCT CCCCAGCTG GCCTCGAG      278
```

(2) INFORMATION FOR SEQ ID NO:552:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GAATTCGGCC	TTCATGGCCT	ATGCACTTCT	TCTTTCTCTC	CTCCTTTTGC	TGGGTGCTTA	60
CCGAGGCCCTG	GCAGTCCTAC	CTGGCTGTCA	TTGGGCGGAT	GCGCACCCGC	CTCGTTGCA	120
AGCGCTTCCT	CTGCCTGGGC	TGGGGTCTGC	CTGCCCTGGT	GGTGGCCGTG	TCTGTTGGCT	180
TTACCCGAAC	GAAAGGATAC	GGTACATCCA	GCTACTGCTG	GCTCTCCCTG	GAGGGCGGCC	240
TGCTCTACGC	CTTTGTGGGC	CCTGCAGCCG	TCATTGTCTT	GGTGAACATG	CTCATCGGAA	300
TCATCGTCTT	CAGCAGCTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

GCCAAAATCA	AGCAAAGTAT	GAAGAAAGAT	AAAGAAGGGG	AAGAAAAAGG	GAAGCGAAGA	60
GGATTCCCCA	GCATCCTGGG	ACCCCCACGG	AGACCAANCC	GTGATGACAA	CAGTGCAATT	120
GGCAGAGCCA	TGGAATACA	GAAGGCGCGC	CACCCTAAGC	ACTTATCCAC	ACCCTCATCT	180
GTGAGTCCTG	AACCTCAGGA	CTCTGCCAAG	TTGCGCCAGA	GTGGGTTAGC	AAATGAAGGA	240
ACAGACGCTG	GATACCTGCC	TGCCAATTCC	ATGTCTTCTG	TAGCTTCAGG	GGCCTCTTTT	300
TCCCAGGAAG	GAGGGAAAGA	GAATGATACA	GGATCAAANC	AAGTTGGAGA	AACATCAGCA	360
CCTGGAGACA	CCTTAGATGT	CACCCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

GACGGCTACA	CCATGGGCCG	GCTGCTGCGG	GCCGCCCGGC	TGCCGCCGCT	GCTTTCGCCG	60
CTGCTGCTTC	TGCTGGTTGG	GGGAGCGTTC	CTGGGTGCCT	GTGTGGCTGG	GTCTGATGAG	120
CCTGGCCCCAG	AGGGCCTCAC	CTCCACCTCC	CTGCTAGACC	TCCTGCTGCC	CACTGGCCTG	180
GAGCCACTGG	ACTCAGAGGA	GCCTAGTGAG	ACCATGGGCC	TGGGAGCTGG	GCTGGGAGCC	240
CCTGGCTCAG	GCTTCCCCAG	CGAAGAGAAT	GAAGAGTCTC	GGATTCTGCA	GCCACCACCA	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

```

GAATTCGGCC TTCATGGCCT ACCCTCTCAC GCCACCCCGG CCCCCACCGG GCTGCAGGTG      60
CTGCTGATGC GCTGGGATCT GATTGAGGAT AAAAAGGAAG GAGAGATGAC CCCTACCCCC      120
TCATCCCCCA GTTTTGAAAA GGTCTAAGCA AGTGAGTCTG GTGGAGGAGC TGAGGGAGGG      180
AGCCATGGAA GGTGCCAGAA GGAAGGTTGG CGGGGGCAGC TGTGGGCCGT GGCTTGGGCT      240
GGTCAGAGTG GCGTGAGCTG CCCGGCGCCT GCCCTGCCCA AGTGACCAGG GAAGTGTGTG      300
TGTGTCCATG TGTATGCGTG GCTCGAG                                     327

```

(2) INFORMATION FOR SEQ ID NO:556:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC TTCATGGCCT AGAGAAGGAG CCAGCTGGGG CCGAATCCAT CCGCTTGAAC      60
ACCAAAGAAG ACAAAAATGG TGTCCCGGAC TTAGTGGCCC TGCTGGCTGT GAGAGACACC      120
CCGGACGAGG AGCCGGTGA CAGCGACACT TCGGAGAGCG ACTCGCAGGA AAGTGGGGAC      180
CAAGAAACAG AGGAGTTGGA TAATCCTGAG TTCGTGGCCA TTGTGGCCTA TACCGACCCG      240
TCGGACCCCT GGGCCCGGAA GGAGAACTCG AG                                     272

```

(2) INFORMATION FOR SEQ ID NO:557:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

```

GAATTCGGCC TTCATGGCCT ATTTCCGATC TATGTATCTG TACTCATACA GCCTCATCGG      60
GCTAAACAGC CTTCTTTTCA GAACAGTAGA TCACTCAACT GGGTTTTTCAA GTGACTGTTT      120
ACCTTTCAAG GCTGGCTTTA TAGGTCTTGC CTCACTGTAT CCAGCAATCC AAACCTTACC      180
CTATCCCACT CAGGACTGCA CACCTCATAT TGAAAGACAT ACCTTAGAAC CAGACTCCCC      240
AAACCTTACA AATATCCAC CTTGACTCC CGTTCTCGAG                                     280

```

(2) INFORMATION FOR SEQ ID NO:558:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

```

GCAATGGTCT CCAGGATGGT CTCTACCATG CTATCTGGCC TACTGTTTTG GCTGGCATCT      60

```

```

GGATGGACTC CAGCATTTC TTACAGCCCC CGGACCCCTG ACCGGGTCTC AGAAGCAGAT 120
ATCCAGAGGC TGCTTCATGG TGTATGGAG CAATTGGGCA TTGCCAGGCC CCGAGTGGAA 180
TATCCAGCTC ACCAGGCCAT GAATCTTGTG GGCCCCCAGA GCATTGAAGG TGGAGCTCAT 240
GAAGGACTTC AGCATTTGGG TCCTTTTGGC AACATCCCCA ACATCGTGGC AGAGTTGACT 300
GGAGACAACA TTCCTAAGGA CTTTAGTGAG GATCAGGGGT ACCCAGACCC TCCAAATCCC 360
TGTCCTGTTG GAAAAACAGC AGATGATGGA TGTCTAGAAA ACACCCCTGA CACTGCAGAG 420
TTCAGTCGAG AGTTCAGTT GCACCAGCAT CTCTTTGATC CGGAAACACT CGAG 474

```

(2) INFORMATION FOR SEQ ID NO:559:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

```

GAATTCGGCC TTCATGGCCT AATTTTTTTG TTGTTGTTTC CTTTTGTAT TTTACTGATA 60
TCACCAGGAT AGTTTACTCT CCTTCTAGCT TTCTGCTTAC CGCACACTGG ATAACACACA 120
CATACACACC CACAAAAATG CTCATGAACC CAATCCGGAG AAGGTTCCAG CAGGTCCCCC 180
ACCCTCCCCT CCTCCTCCTA CTTCTCCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG 240
ACACCTGGGC AGACCCGCCG GCTCTCCCCC CACCCACCCC CGTCTCGAG 290

```

(2) INFORMATION FOR SEQ ID NO:560:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

```

GTGTATGTGG GGGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTGTGTGT 60
GTGCGCCTGC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA 120
GAAACATGGC GCATGTGAGC ATGCCACTTC TTGTGTGCCT GTGACTGTTC AGAATGTACA 180
CGGCCCTGCA GCTCCCGAAG GCCAGCTCTG CTGCAACCCC TCCTCTGTCC AACACAGTCC 240
TCACTGGTGT CTTTTCCTCT TCAAATCTAC AGCATTTCTG ATCTCTGCAA ACAATTTAAC 300
CCAAAACCAA GTTCTGGCTG ACAAGGCTAC ATCTTGTTTC TTGTGCGTGA TTAGCCTCGA 360
G 361

```

(2) INFORMATION FOR SEQ ID NO:561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

```

GTTCTAGACC TGCCTCGAGA TATGCCGGAA GGTTCATGG CTGGTCCCAG GGCCAGCACA 60

```

```

GGCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTAACT TTATTTTCTG TTTTATGAGT 120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC 180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG 240
CAGAGGGCGG ACCGGGTGGG CAGGGGCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT 300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCCTTT TAAACAAAA TGCCCTCGTT 360
TGTAACCTT TAACGCTCGA G 381

```

(2) INFORMATION FOR SEQ ID NO:562:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

```

GCACTCATAA AAATCTTACT CAGAAATCTT CAGAGGTTTG CTAAGGATAC AATTTGATTC 60
TTACACATTT AATGCTCACC AGCTGCTTAG GCCCACACCA TTTATCCACC CTGATTTGCT 120
ACTGCTCTTT GAAATACAAC CAGTGTTCCTA GCCAGACTGT TTTCTGCTT CTGCTCCCTT 180
TCTCTCTCTC CCAGCACATC TGTGAATTCT TTGACTGGTT TACCACTCCC ACACTCTCTC 240
CCAGCAATGC AGATCTTCTA CACCCTTTAG GATCTAAGCT AAGTCTGCTT CCCAGATATC 300
CTCCCGAACA GCTCGAG 317

```

(2) INFORMATION FOR SEQ ID NO:563:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 472 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

```

GAATTCGGGC TTCATGGCCT ACTTTAATGA GATAGGAACT AGTATATTCA CCGTCTATGA 60
GGCCGCCTCA CAGGAAGGCT GGGTGTTCCT CATGTACAGA GCAATTGACA GCTTTCCCCG 120
TTGGCGTTCC TACTTCTATT TCATCACTCT CATTTCCTTC CTCGCCTGGC TTGTGAAGAA 180
CGTGTTCATT GCTGTTATCA TTGAAACATT TGCAGAAATC AGAGTACAGT TTCAACAAAT 240
GTGGGGATCG AGAAGCAGCA CTACCTCAAC AGCCACCACC CAGATGTTTC ATGAAGATGC 300
TGCTGGAGGT TGGCAGCTGG TAGCTGTGGA TGTCAACAAG CCCCAGGGAC GCGCCCCAGC 360
CTGCCTCCAG AAAATGATGC GGTATCCGT TTTCCACATG TTCATCCTGA GCATGGTGAC 420
CGTGACGTG ATCGTGGCGG CTAGCAACTA CTACAAAGAA GAAAACCTCG AG 472

```

(2) INFORMATION FOR SEQ ID NO:564:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 411 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

```

GCCGCGATGT TCCCCCTTCG GGCCCTGTGG TTGGTCTGGG CGCTTCTAGG AGTGGCCGGA      60
TCATGCCCCG AGCCGTGCGC CTGCGTGGAC AAGTACGCTC ACCAGTTCGC GGACTGCGCT      120
TACAAAGAGT TGCGTGAGGT GCCGGAAGGA CTGCCTGCCA ACGTGACGAC GCTTAGTCTG      180
TCCGCGAACA AGATCACTGT GCTGCGGCGC GGGGCCTTCG CCGACGTCAC ACAGGTCACG      240
TCGCTGTGGC TGGCGCACAA TGAGGTGCGC ACCGTGGAGC CAGGCGCACT GGCCGTGCTG      300
AGTCAGCTCA AGAACCTCGA TCTGAGCCAC AACTTCATAT CCAGCTTTCC GTGGAGCGAC      360
CTGCGCAACC TGAGCGCGCT GCAGCTGCTC AAAATGAACC ACCACCTCGA G              411

```

(2) INFORMATION FOR SEQ ID NO:565:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

```

CACTCAGAAC _CTCAGACTT TCAAAGAGCC AGGAAATCGG TATAAAATTT TTGAGATAAC      60
ATTAATTAAG CTTTTTGCG TTTTTCCTAG GACCAGATTA AACAGAAGTT TTCCTTTACA      120
GTATTCATTA TGGTTGGTAT CTCCAGAGTT CATCCTTTT TTGTGGTACT GGGAAAAGTT      180
GCAACATTTA CCTTTGCAGG GACATGGATG GAGCTGGAGG CCATTATCTT TAGCAAAC TA      240
ACACAGAGCC AAAGACAAA ACCACTCGAG                                270

```

(2) INFORMATION FOR SEQ ID NO:566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

```

GTTCTGTGTG ACTAACGGCT CATCTTTTCC TTGTTTTTGT TTTTTTTTGG TTCTTTTTTT      60
CCATGTCACT AAAGGCCAAA ACTGGAACCA AGGATTTAAT AACTATTATG ATCAAGGATA      120
TGGAATTAC AATAGTGCCT ATGGTGGTGA TCAAACTAT AGTGGCTATG GCGGATATGA      180
TTATACTGGG TATAACTATG GGAACATGGA ATATGGACAG GGATATGCAG ACTACAGTGG      240
CCAACAGAGC ACTTATGGCA AGGCATCTCG AG                                272

```

(2) INFORMATION FOR SEQ ID NO:567:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

```

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC      60
AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTTCTCT GCATGATACT TCTGCTTATT      120
GTCCTTCACA CTAGCTACAT GATTTATAGT CTGTCTCCCC AATATGTTAT GTATGGAAGC      180

```

CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCTT	240
TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:568:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GGTGTTTGGC CACAGTTCGG GACCTATGGT AGAAAAATAC TCAGTAGCTA CCCAGATTGT	60
AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTTCTGTTT CAGAAAGTTG GAAAACCTGC	120
AGCAACTGCA GTAGGTGGTG GCTTTCTTCT TCCTCAGATT GCTAGTCATA GTGGCTATGT	180
GCAGATTGAC TGAAGAGAG TTGAAAAGA TCCTAAATAA GCAAAAAGAC AGATTAAGAA	240
ACGAGCTCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:569:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 544 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

CACAGTGCTG GCTCACAACA AGATGCTCAA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC	60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC	120
GGACGGCGGT NATTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA	180
GGAAGTCGGA CAGTGAACA AATTCCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG	240
AAAACCCTTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAAATGTAG	300
TCGCCATAAA GTATGCATTG CTCAAGATTC TCAGACTGCA GTCTGCATTA GTCACCGGAG	360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT	420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTGTGGTT CAGATGGTCA	480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT	540
CGAG	544

(2) INFORMATION FOR SEQ ID NO:570:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

GAATTCGGCC TCATGGCCTA CATTAAAGAA AAGCTTCCCA CACATCCATT TGAAGCTGAT	60
CTCCTTGAGA TGGCAGAAAT GATTGCAGAA GATGAAGAGA AGAAGACTCT ATCTCAGGGA	120

GAGTCCCAAA	CTTCTGAACA	CGAACTCTTT	CTAGACACCA	AGATATTTGA	AAAAGACCAA	180
GGAAGTACAT	ACAGTGGTGA	TCTTGAATCA	GAGGCAGTAT	CTACTCCACA	TAGCTGGGAG	240
GAAAGAGCTGA	ATCACTATGC	CTTAAAGTCA	AATGCTGTGC	AAGAGGCTGA	TTCAGAATTG	300
AAGCAGTTCT	CAAAAGGGGA	AACCCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:571:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

GAATTCGGCC	TTCATGGCCT	AAGGGAAAAC	ATTTTGTCATG	TGTAAAGCTT	CATGAAGTTC	60
TCTTTAAAAA	ATACCAAAGC	TTGTTTATTT	CTGATAATTA	ACCTAAGCCC	TTATGAAAAA	120
AAACAAAATG	AAGGGATTAT	GACAGGTATT	ACCAAAAACA	CCAAAAGGAA	CAAGGGGGCC	180
TGCGTTAAAA	CCTAATTGCT	AATGCTTCAC	AACTAGGAGA	GCATGCCGTC	TTATGTTTA	240
AAAAACCCAG	GGTCTCCACC	CTTCCTTTGA	TTTGTGCAAT	TCTGTCTTCC	ACAGTTCGCG	300
AGCTTACTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:572:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

GAAAATGTTC	ATGGCCGCAG	CAGGAGTAGA	GGTCTTGAGC	CTCCTATTTT	TCTGCATCTA	60
CTGGGGTCAA	TATGCCACCG	ATGGCATTGG	CAACGAGAGT	GTGAAGATCT	TGGCCAAGCT	120
GCTCTTCTCC	TCCAGCTTCC	TCATCTTCCT	GCTGATGCTT	ATCCTCCTGG	GGAAGGGATT	180
CACGGTGACA	CGGGGCCGCA	TCAGCCACGC	GGGCTCCGTG	AAGTTGTCTG	TCTACATGAC	240
CCTGTACACG	CTCACCCATG	TGGTGCTGCT	CATCTACGAG	GCGGAATTCT	TTGACCCAGG	300
CCAGGTACTG	TACACGTATG	AGTCGCCGGC	CGGCTACGGG	CTCATTGGAC	TGCAGGTGGC	360
GGCCTACGTG	TGGTTCTGCT	ATGCTCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:573:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

GAATTCGGCT	TCATGGCCTA	AAAAAACTC	CAGAAAAAAA	CAACAGCGCG	GTGGTGGGGT	60
TTTGTTAATT	TCGCCTTTT	TTTTTTTTC	ACGCGCCACG	AAATTCAGGC	TGCGTTTAGC	120
TCCTGAGAAA	TATCCAAAGT	AATTGCAGAT	TGCGGAGACG	CACAGCATTA	GTTCAAAAAA	180

GACCCGAGGC	ATTGGGGCAG	GGTTAGGTGG	AGGGCACCGG	AGGCTCTACA	CAAGAAAAGC	240
AGGAACCTGC	AAACCCACGT	AGATTTCCAC	TACAACCTTC	CCTTTTCTTC	TGGCTAGCCA	300
TCCAGCGCTC	TCCATGGCAC	TGCATGGCAC	AAGTTGCTTC	TGATAGTCTT	TTAAGTTTGC	360
TAAGGGAAC	CCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:574:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

GAATTCGGCC	TTCATGGCCT	ACAGCCTCAA	GTCACTCCCA	AGCCCCCTCC	TTGTCTGTGC	60
ATCCGGGGGC	AGCTCTGGAG	GGGGTTTGCT	GGGGAAGTGG	CGCCATCGCC	GGGACTCCAG	120
AACCGCAGAA	GCCTCCCCAG	CTCACCCTTG	GAGGACGGCC	GGCTCTCTAT	AGCACCAGGG	180
CTCACGTGGG	AACCCCCCTC	CCACCCTCGC	GAGTCTGTTT	CCAAGGAGGA	GAAGGAGCAG	240
AACATGACT	TAACTGAAGT	CTCAGAGAGC	ATGAAAGCTT	TCATATCCAA	AGTCTCAACC	300
CACAAGGGAG	CAGAGCTGCC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

GAATTCGGCC	TTCATGGCCT	ACTCAGCCTC	CCTAATAGCT	GGGATTACAA	GCGTGAGCCA	60
CCACACCCCG	CTGGGAAATA	TCTTAAAAGA	ATCAAAATAA	GAAAGTTACT	CTACTTAAAT	120
CGTGTGCTTT	TTCTGTGTGT	GATTATGGT	AATCTTACCA	TGGGGTATCT	GATTACTTTA	180
GAAAGATCCA	TTTAGCTTAT	TTTTTCTTC	TTTGGGTAT	TTTTTCTTC	CTTCCATTG	240
CACAGCCTCC	CCCCAAATAA	AAAATAAAGA	TATAAAGTCT	ATCTTCTCCC	TCTGTTCAGT	300
TTAAGTAAAA	AGAACTTTTG	CTTCCATTTT	AATAATAGAA	TTTGTGTGTA	TATAATATAG	360
GCAGTGATTT	GGCCTCAAGC	TGAGTTTAGA	TTTGAAAAGA	TGAGAATATT	AAAGCTTGTC	420
AGCCAGCCCA	CTCTCGAG					438

(2) INFORMATION FOR SEQ ID NO:576:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

GAATTCGGCC	TTCATGGCCT	ACTGINTTCC	ATAAAGGCTG	TACTAATTTC	CATTCTCACC	60
AACAGTTCAC	TAGGGTTCCC	TTTTCTCCAC	ATTGTTGCCA	ACATTCTTTA	TCTTGTGTTT	120

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NTTAATAACA GCTATCCTAA CAGGTATGAG GTGATCTCTC TCATTGCGGT TTTGATTTC 180
ATTTCCCTAA CGGTTGGTGA TACTGAGCAT TTTTGATAC ACCGGGTCAT TTGTTCTTTG 240
TTGTTGACTT GAGTCCCTTA TATAGTTTGG ATACTGCTGT GGCCTGAATG TTTGTGTCCC 300
CCAAAAATTC GTATATTGAA CTCTCATCCC TAAGGTCAAC AGTTTAGGGA AGCGATTAGG 360
TCCTGAGGAC TCTGCCCTCT TGCATAGAAT TAGTGCTCTT ATAAAAGATG CCCGAGGGAG 420
CTCTTTTGCC CTCCTGCCA TGTGAGGACA CAGCTAGAAG CTACCATCTG TGAACCAGGA 480
AGCCCCCTC ACCAGACACT GTATCTCGAG 510

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(2) INFORMATION FOR SEQ ID NO:577:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

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GAATTCGGCC TTCATGGCCT AAAAAATAAA AATAAAATAT ACAACCAAAG GCAGTATTCA 60
CAGAGGTATT TCTTGGGAAT AAAAGAAGGA ATATAGTCAT TCCTTGGTAT TCTCTTTGGT 120
GTCCAGAGTT ACTTAAAAAT TCTTGGTGTT TATTGCCCTT TAGTCACAGG GATACACCTT 180
TTATTCATT ATTTATTAT TTACCACTCT CATTTCAGC TAGGAATGCA TCTTAGCATT 240
TTTATACTGC TGCTCAACAC AGTGCTTTCA CTCGAG 276

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(2) INFORMATION FOR SEQ ID NO:578:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

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GAATTCGGCC TTCATGGCCT AAATCCTTCC AGATGTCCTG TGAAAATGTT TGAATGCTAC 60
TTGTCTAAAA GTCCACAGAA TCTTAATCAG AGGATGGATG TTTTATTATTT GCAACCAGAA 120
TGCTCTAGTT CTACAGATAG CCCTGTCTGG TATACGTCTA CTTCACTGGA CCGAAACACC 180
TTGGAAAATA TGCTTGTACG GGTTCCTTCTA GTAAAAGATA TTTATGATAA AGACAATTAT 240
GAACTGGAGG AAGACACTCG AG 262

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(2) INFORMATION FOR SEQ ID NO:579:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

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GAATTCGGCC TTCATGGCCT AATTTAGGAC CATTAAAGAG AGTTTGACTA AGAAAGAGCT 60
GTTTGAAACC TCCTGGCTTA TGTATTTTAA GGGGTGTGGT GATCGAGGCT TTCTCCTCTG 120
AGTAGAGTTT GTGCATTGTC AGTATAAGAT TATCATTATC AACATTCTCT ACTAGGCCTT 180

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TCTCCTCAGC	CCCTAAAAAA	ATATGTATAG	TAATGAAGTA	GGAAGATCAT	GTTTATATTT	240
GACTTCACAA	ATTCCTCAGG	CTAAGTTGCT	TTCTACTGGG	GTGTGGCTGG	AGACAAAAAT	300
TACAGGTAAG	ACCTGACTTA	ATTTTGTATA	GGGAGGTTCT	TAAGAGGCTT	TTTCGGAATC	360
ACTCACCTCG	CCCACTTCCA	TGCAGGGATG	TGGTGAGAGC	CCTTCAGTCT	ACTTAGGAAA	420
ACCTGGCACA	TGACTCGAG					439

(2) INFORMATION FOR SEQ ID NO:580:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC	TTCATGGCCT	AGATATTCTC	AGGGTCATCA	AGACTCCTGA	GATAGCAAAC	60
TTGGCCTTGC	TTGGCTTTGG	AGATATCTTT	GCCCTGCTGT	TTGACAACCG	CTACCTGTAC	120
ATCATGGACT	TCCGGACAGA	GAGCCTGATT	AGTCGCTGGC	CTCTGCCAGA	GTACAGGAAA	180
TCAAAGAGAG	GCTCAAGCTT	CCTGGCAGGC	GAAGCATCCT	GGCTGAATGG	ACTGGATGGG	240
CACAATGACA	CGGGCTTGGT	CTTTGCCACC	AGCATGCCTG	ACCACAGTAT	TCACCTGGTG	300
TTGTGGAAGG	AGCACGGCTG	ACACCATGAG	CCACCAGCCG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:581:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 740 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGATTGCC	ATCTTGTTTT	TGGTGGGTTT	60
CGGCCGACTT	CTTTGCCACT	TGCTATTTTA	TTTTCTAGGT	CTTTGTGCCC	CGTATTGTGT	120
GCTGAACTCC	NGTCTCATCC	TGTGACTAAG	ATTGCCTAAC	CTCCTGGGAA	TGCAGCCCAG	180
TAGATCTCAG	CCTTACTTTA	CCTAACCCCT	TTCAAGATG	GAGTCACTCT	GGTTCAAACA	240
CCTCTGACAT	TCGCAGTGGA	ATCCATTAAA	AGATGTAAAG	GAGATATGAT	TATATTTCTA	300
AATTGTCACT	CCAGCATCCC	CTACGCCAGA	CATTATGCCA	GTCTCTATCC	ATACAGTATC	360
TCATTTAATC	CTCCCGTCAT	TAATCTCATT	TIACCAATGA	GTAAACTTGA	AGCAAATGAG	420
TGACTTTCTC	AAGGCTACCT	ACTTACGCCT	TACCAGGGCC	AGGATTCAAA	CCTAGACTTG	480
TTCAGCGACA	GAACACACAC	TTAACCATCA	CCCACTTAGG	CCATGAAGGC	CGGCCTTCAT	540
GGCCTAAACT	GCTGTTATTT	TGGATTATAT	GGAGTTATGA	AAATCTAAAT	GTTTTACAAA	600
GTTAAAAAGT	ATTCTTTTTT	TGCTCACTTA	TAACTCAAAA	ATCACTAAAG	TCATTCTGCT	660
AAACATGCCA	CGAAGCCAAG	CTTCTTGCCA	TATGTCTGCA	TAATTTTATT	AAATCACTGC	720
TATTGACGTG	CAACCTCGAG					740

(2) INFORMATION FOR SEQ ID NO:582:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

GAATTCGGCT	TTCATGGCCT	ACAAAGGGGT	AGCAAGGCAT	GTCTTACATG	GTGGCAGCAG	60
AGAGAGAGAG	CAGGGAAAAC	TGTCATTAT	AAAACCATCA	GATCAGTTGG	GTTGTGCAAA	120
TGGTGGAGAA	GAAAACCTCA	GGAAGAGTGC	ATAGACTGAG	CAGAGAAGAG	GACCAGCTAC	180
CTCCGTAGAG	GCAGGGAGAG	CASCCAAGCT	GGAGCCTGAG	CAGCATTGCT	GGACATGGAG	240
AAGGTCTGGA	ATCTTGTCAA	GGAAGCAAGC	AAAGGGTTTC	TTTCTATTCA	ATGAAGTCCA	300
CTCCCAGGAC	CCTGGGCAGC	AACGGGTGCT	GGACTGGGCC	ACCTGGCAGC	GTACATCAA	360
CTGGCAGCTA	GAAGTCCTGG	AGAATGACAA	CTTCCAGGAC	GACCCCATG	TGGGACTCCC	420
TCAGCTCAGC	AAGAGACTGC	CACAGTTCGA	TGATGATGCA	GACACCAGAC	AGTAAAAAGAA	480
GAAAACCTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:583:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

GAATTCGGCC	AAAGAGGCCT	AAACAGTCCA	GAGAGGCATA	AATCAGACCC	AGTTCCTAGC	60
TGGCTTGTCC	TTATCAAGTA	AATGGAAAAG	GGGCCAGGCC	AAAGCAGGGC	AAGATGACCT	120
TGGACTTGGG	AGAGACTTGG	ACTCATGCCA	CAATCCTAGG	GTGCCCCTG	GACCATTGCT	180
TTTCTGAGTT	TTGTAGTCAT	TCGGTGTCTG	AAGTAAGGTA	GATTGAAGTG	AGGCCTTCGG	240
TTTCCATCTG	GACCCTTTCT	CTCCTGTTT	CTTTTTTTC	GCCTTGTCCT	AGGGATGTTT	300
AATAGCCAG	AAATGCAAGC	CCTCCTCCAG	CAGATCTCTG	AGAACCCCA	GCTGATGCAG	360
AATGTGATCT	CAGCACCTTA	CATGCGCAGC	ATGATGCAGA	CGCTTGCCCA	GAACCCGAC	420
TTTGCTGCTC	AGATGATGGT	GAATGTGCCG	CTCTTCGCGG	GGAACCCCA	ACTGCAGGAG	480
CAGATCCGCC	TGCAGCTCCC	AGTCTTCCTG	CAGCAGATGC	AGAACCAGA	GTCACTCTCC	540
ATCCTTACCA	ATCCCATAC	CTCGAG				566

(2) INFORMATION FOR SEQ ID NO:584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

GAATTCGGCC	TTCATGGCCT	AGTTGAAAT	GATCATTACA	CAATATATTC	CTAAACATAA	60
ACTGAGTAAA	CTTGAAACAG	CTCACTGTGT	GGAGAGGACC	ATTCCCGTTT	TGCTCACCAG	120
AAGTGGAGAT	TCTTCTGCCC	GCCTCCGCGT	CACAGCTGCA	AATTTTATTC	AGGAAATGGC	180
CTTGTTTAAA	GAAGTTAAGT	CTCTCCAAAT	TATTCCATCC	TACCTGGTGC	AGCCATTGAA	240
AGCAAACCTCT	TCAGTTCACC	TGGCAATGAG	TCAGATGGGC	CTCCTGGCCC	GGCTGCTGAA	300
AGACCTGGGC	ACTGGCAGCT	CGGGCTTCAC	CATTGACAAC	GTGATGAAGT	TTTCAGTGAG	360
TGCCCTGGAG	CATAGAGTGT	ATGAGGTCCG	CGAGACGGCG	GTTCGAATTA	TTTGGACAT	420
GTACAGACAG	CACCAGGCTT	CCATCCTGGA	GTACCTTCCT	CCAGACGACA	GCTAATCTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:585:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

GAATTCGGCC AAAGAGGCCT AATAAAGGTG TGGAAACTTC ATTCATTCAT ATCTTCAACA	60
CAAATTGTAG GTAGCCTGTT TTTTAAACA TTTATTCAAC AAATATTTAG TCCAAGCCAC	120
TATTACTTAC TACCTTCTCT ACTATTGTAT GGACTTTTAA CTATCTCTGA CACTATTAC	180
TATTCTTCCA CATTCTCTAT TATTATACC TATGGTAAAA TTTGCCAGTT TGACCATACA	240
ACTAATACTC ACAGGGACAC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:586:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

GAATTCGGCC AAAGAGGCCT ACTCGAGTTT GGTGCTTTAT TTAGCAAGTG AGTAAAAATA	60
TTGGAATATT TAAGTATTTG CATAAAAAAT CAAATGGTAG TGTTTTGTAA TCTCTACTGT	120

(2) INFORMATION FOR SEQ ID NO:587:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 503 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

GAATTCGGCC AAAGAGGCCT ACTCGAGTCA GGTCTAGAAT TCAATCGACG GTTTAGGAAA	60
AAGACAATTT AAGAGAAGAA CTAAAGAAAA GAACAGAAAC TGAGAAGCAG CATATGAACA	120
CAATTAAACA GTTAGAATCA AGAATAGAAG AACTTAATAA AGAAGTTAAA GCTTCCAGAG	180
ATCAACTAAT AGCTCAAGAC GTTACAGCTA AAAATGCAGT TCAGCAGTTA CACAAAGAGA	240
TGGCCCAACG GATGGAACAG GCCAACAAGA AATGTGAAGA GGCACGCCAA GAAAAAGAAG	300
CAATGGTAAT GAAATATGTA AGAGGTGAGA AGGAATCTTT AGATCTTCGA AAGGAAAAAG	360
AGACACTTGA GAAAAAATT AGAGATGCAA ATAAGGAACT TGAGAAAAAC ACTAACAAAA	420
TTAAGCAGCT TTCTCAGGAG AAAGGACGGT TGCACCAGCT GTATGAACT AAGGAAGGCG	480
AAACGACTAG ACTCACTCTC GAG	503

(2) INFORMATION FOR SEQ ID NO:588:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 567 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

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GCCACTATGG TACCAAAACC TCAGTCTTCA CATAGTCAAA CTTGGACACA AACAGCACCT    60
CCCACAAACA TTCTTATCCT CATCCCAGCA TTGGTTACTG ACCACACACT CTAGCAGGTC    120
ACTCAAGCGC TAATGCTGGG AAGGACCTCT GAATACTTCT CTTTGTCTTG TGCCACACAG    180
CCAGGGTCAC CAAAGCCTGT TAATGCTACC TCCAAAAAAG GCAAATCTGA CCCCTCTTCC    240
TCAAAACCCA GCCACATAGT AAGTTCAAGG ATTCAGTCAC AGGTCTGCCT TAGTGCACTA    300
GCCCTATAAC AGTAACTAT TCACCTCCCC TCCAGTCCCT TGCCCCCTTT CAAGCAATT    360
CCTGTACTGC CAAGGGAATT ACTTTTCTAA AATTAGCTAA GAAACTTTTG ATGGTATCTT    420
ACTGTCCCAA AAATAAATT TAATTCCTTC TTTAGCATGG TATAAAAAGG ACACAACAGA    480
GTTTGGTCTA GTGTCCTTTT AAAGACACTA GATTTCATCAT CACCATACCG CATGTACCCT    540
ATACGACTTA TCAATTCCCT ACTCGAG                                     567

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(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

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GAATTCGGCC AAAGAGGCCT AGGCATGGTG AGTTTTGATC TTCTTCCCCT TCTTTTCTTC    60
CCCTTCTTCT TTCCTTCTTT GATCTTCTTC CCCTTCTTTT CTTCCTTCTC CCCTTCTTTT    120
CAATTTCTCC CACGTCAA                                     138

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(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

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GAATTCGGCC AAAGAGGCCT AGAGAGAATG GAAAGATAA GGAACAGAAA CAAACAAATA    60
CCGATAAAGA AAAAAATAAA AGAGAAAGGG AGCTTCTCTG ACACAGGCTT GGGTGATGGA    120
AAAATGAAAT CTGATTCTTT TGCTCCCAA ACTGATTCTG AGAAGCCTTT TCGGGGCAGT    180
CAGTCTCCCA AAAGGTATAA GCTCCGAGAT GACTTTGAGA AGAAGATGGC TGAATTCCAC    240
AAGGAGGAGA TGGATGATCA AGATAAGGAC AAAGCTAAGG GAAGAAAGGA ATCTGAGTTT    300
GATGATGAAC CCAAATTAT GTCTAAAGTC ATAGGTGCAA ACAAAAACCA GGAGGAGGAG    360
AAGTCAGGCA AATGGGAGGG CCTGGTATAT GCACCTCCAG GAAAGGAAAA ACCGAGGCAG    420

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(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

GAATTCGGCC	AAAGAGGCCT	ACATTGCTTT	TCAAATAACT	TAAAATAACA	CGTTATGTGC	60
CATGTGGCTA	CTTTAGTAAT	ATTGCCAAGA	AGAGCACAGT	TTTACACTA	GTGGCATCTC	120
AGTGAAATTA	ACCAAAGATG	AAGCTTTGGC	TTTGCTGGTG	AGATCAGAGC	CCTCCTGAGC	180
AGGCAGCGCC	ACTCCAGGGT	TCAGACAGGG	CTGCACAGGC	GGCAGAGATA	CAGGGTCTGA	240
GGGCTGAGAC	GCCATGGGGC	CGCTGCTGCT	TATGTGGTTG	GATTGTTTAC	AAGCCTCATT	300
ATTAAAACTG	AAGGCATTTT	TTTTTTTCTG	CTGCCTTTCC	CAAAGTGGTT	AGGTTTGGAA	360
AAGAGATGAT	GATGGTAATA	TTTATTGTG	CTTTTAAGC	CATTTCCCA	AATGGGACTA	420
GCATGCTTGT	TTTCAGTATA	CCGTGGCCTG	CCTCATGATG	GTTTGGAGAT	ACTGTCTGTG	480
GATGTGAGGT	GGGGACTTCA	TTCATTGTCC	TATTTCTATC	TNCACTTTGT	GCCTGGAGAG	540
CTTTCAGGGG	AGGTGGAGGA	GGAGGTCTG	CCAAGCTACT	GCAACATCTG	TCACCCACTA	600
NACCCAGACC	T					611

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 443 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

GAATTCGGCC	AAAGAGGCCT	AATTGAATTC	TAGACCTGCC	TGAAACCTGT	CCCTCCTAGG	60
AAATTGAATA	GCTTGAGTTA	CGAAGGAAC	GCATGGGACA	GACTGAGTTT	TGTCCTCTC	120
TTCCCTGGAA	GCTGGATGTC	CTTTACAGCT	TTGCCAGTA	TGTCATGTGG	CCCTGAAAGT	180
ACATAATCCA	GAGTGGACTG	CCTTTCAGGG	TCCCTCAGCT	GTGAAAGTGG	AGCATTCTA	240
TCAAGACTAC	ATCTTTCCTG	TTCAGCTTTC	TTCAGCCTTG	GAGGAACCAC	ACACAATGGA	300
TCCAAGACTT	CTGTCCCTTG	CTAATTATCT	ATAAGAAGTA	AACCCATTTC	ACATAACTTG	360
TGAATATGTT	TTCTTTCACT	GGATTTTGGC	AAATAGGTAC	CCAGTGCATG	GTGGACCTAC	420
ACAGTTAGGC	CTCTTTGGCC	GAA				443

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 441 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

GAATTCGGCC	AAAGAGGCCT	AAAAGCATT	AGTATTGGTA	AAATGAGTAC	AGCTAANCGA	60
ACTTTAAGTN	AAAAGGAGCA	GGAAGAATTA	AAGAAAAAGG	AGGATGAAAA	GGCAGCTGCT	120
GAGATTATAG	AGGAGTTTCT	TGCTGCTTTT	GAAGGAAGTG	ATGGTAATAA	AGTGAAAAACA	180
TTTGTGCGAG	GGGGTGTGTT	TAATGCAGCT	AAAGAAGAAC	ATGAAACAGA	TGAAAAAAGA	240
GGTAAATCT	ATAAGCCATC	TTCAAGATTT	GCAGATCAAA	AAAATCCTCC	AAATCAGTCT	300
TCCAATGAAA	GACCACCATC	TCTTCTGTG	ATAGAAACCA	AAAAACCTCC	ACTTAAAAAA	360
GGAGAGAAAG	AAAAGAAAAA	AAGCAATTTG	GAACCTTTCA	AAGAAGAATT	AAAGCAAATT	420
CAAGAGGAAC	GTCGACTCGA	G				441

(2) INFORMATION FOR SEQ ID NO:594:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 562 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

```

GAATTCGGCC AAAGAGGCCT AAGAAAACCT AGCTAATAAA GAAAAAGCTG TTGCTCAAAT      60
GAAGATAATG ATCTCAGAGT GTGAATCATC TGTGAACCAG CTGAAAGAAA CATTGGTTAA      120
TCGAGATCGT GAGATAAACA GCCTCCGGCG CCAGCTTGAT GCAGCTCACA AAGAACTCGA      180
TGAAGTAGGA AGATCTAGAG AAATCGCTTT TAAGGAAAAC AGAAGACTGC AAGATGACCT      240
GGCTACAATG GCAAGAGAAA ATCAAGAAAT CTCATTGGAA TTGGAAGCAG CAGTGCAAGA      300
AAAAGAAGAA ATGAAGAGCA GAGTTCATAA ATACATAACA GAGGTGTCAC GATGGGAGAG      360
CTTAATGGCT GCAAGGAAA AAGAAAATCA AGATTTGTTA GATAGATTTC AGATGCTTCA      420
TAACCGTGCT GAGACTGGG AGGTCAAAGC CCATCAAGCT GAGGGAGAAA GCAGCTCAGT      480
TCGACTGGAA CTCTTTCTA TTGACACTGA GAGGAGACAT CTTGGGGAAA GAGTGGAGCT      540
ATTAGAAAAA GAAAATCTCG AG                                     562

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(2) INFORMATION FOR SEQ ID NO:595:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 426 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```

GGAAGAGCAG AATTTGGTGG CTTATCCTCA TGATGGAAAA ATCTTTTCTT GCACCTCACA      60
AGATATCCCT CCTGAAAATG AACTGCTTTT TTATTATAGC CGAGATTATG CTCAACAGAT      120
TGGTGTTCTT GAACACCCAG ATGTGCATCT CTGTAAGTGT GGCAAGGAGT GCAATTCTTA      180
CACAGAGTTC AAAGCCCATC TGACCAGCCA CATCCATAAC CATCTTCCTA CCCAGGGACA      240
TAGCGGCAGC CATGGGCCAA GTCACAGCAA AGAAAGGAAG TGGAAAGTGT CAATGTGCCC      300
CCAAGCTTTT ATCTCTCCTT CCAAACCTCA TGTCACCTTT ATGGGTGACA TGGGTATGAA      360
GCCCCACAAG TGTGATTCTT GTAGCAAGGC TTTTAGTGAT CCCAGCAACC TGCGAACCCA      420
CTCGAG                                     426

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(2) INFORMATION FOR SEQ ID NO:596:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

```

GAAAAATCAG TCGACTGAAT GACACCATCA AATCTTTGAA ACAACAGAAG AAACAAGTGG      60
AACATCAGCT GGAAGAAGAA AAGAAAGCAA ACAATGAGAA ACAGAAAGCT GAAAGGGAGC      120
TAGAGGGTCA AATCCAGAGA TTGAACACAG AGAAAAAGAA ACTAAATACG GACCTGTATC      180

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ACATGAAACA TTCTCTCAGA TACTTTGAAG AAGAGTCCAA GGATCTGGCC GGCCGCCTGC	240
AACGTTTCATC GCAGCGTATA GGAGAGTTAG AGTGGTCTCT CTGTGCTGTC GCCGCCACAC	300
AGAAGAAGAA GCCGGATGGG TTCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:597:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

GAGAAAGTGC	AGAGGGGCCA	GTGTTGTTGT	TACCTGAAAG	GTAAGTGCAG	CCCACAAAAA	60
TGCAGTGAAG	AAGAAGATAT	ATGCATATGT	TTAAGTTAAT	ACAATGAGA	TACATTTAGC	120
AGACAGAATC	AATAGAGTTG	ATGAGTGACT	GACTGGATGT	GTGGGGAGTT	TATATCACTC	180
CCAGGTTTTT	GACTTGGGCC	ACCGGGCACT	CAGGAAGGAA	AAAGAGGATC	CAGGGAGAGG	240
AACTTTTCTG	AGGACTGGGG	TAGGGCTGAA	CAGCTGCATT	CGAGACTGGT	GGAGGGTGGG	300
CTGGGCATGG	GATGCACAAA	TGGAATTCC	ACTGGGTCTG	CAGCTCACAC	ATAGGCATGA	360
CCAGCATAGA	GATAGAGAGG	CCCCAGTGCT	GCTGAGTAAC	TGTGATTCCC	CAGGTGATGG	420
CATCAGCTGA	GAAGGGAAGG	AAGCCCATGT	GAGGACACTG	AAGAAGGAGT	GAGCAGACAA	480
TAAGAAGCCC	ACAGAAGACA	GAGAAGGAAC	AACTAGAAGG	AGGCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:598:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

GAAAAAGATG	AAATCTGATG	GATTAGGAGC	ATCTGGACAT	TCGTCAAGTA	CCAATAGAAA	60
TAGTATAAAT	AAAACCTCTG	AGCAAGATGA	TGTAAAGGAA	AAAGATGGTA	CAAAAATAGC	120
ATCTAAGATT	ACAAAAGAAC	TTAAACTGG	GGGAAAAAAT	GTTTCTGGAA	AGCCCAAAAC	180
TGTAACAAAA	TCCAAAACAG	AAAATGGTGA	TAAGGCACGG	TTGGAAAACA	TGTCACCTAG	240
ACAAGTTGTA	GAAAGATCAG	CAACAGCAGC	AGCAGCAGCA	ACTGGACAGA	AGAATTTACT	300
AAATGGAAAA	GGAGTGAGAA	ATCAGGAAGG	GCAAAATTCA	GGTGCCAGAC	CCAAGGTACT	360
CACAGGAAAC	TTAAATGTGC	AAGCCAAAGC	AAAGCCTTTG	AAGAAAGCTA	CAGGGAAGGA	420
TTCACCATGC	CTCAGCATCG	CAGAACCCTT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

GAATTCGGCC	TTCATGGCCT	AGGTCCTCAA	GCATTGCTTC	AATATCAATA	TCGTCTGCCA	60
TTTTCTCTAA	ACGCCTGTTC	CGGCCTTCGG	GCGCCTGTGG	TGCTCGTGTT	CGGGAAGAGA	120
TTGCTGCTGC	TGCTGCTGCT	GCTGCCGCCG	CCGCCGCTTC	TGTTGCTACT	GTTAAGCCCC	180
TAGGCCCCAGG	CCGCCGAACC	GCCCAGCCCC	AATATCGGGT	TCCAAGGACG	GCTAGGCCCC	240
AGAGAATCTA	AAAAAAACAA	TGGAATTAGA	GAAGCCCACG	CGGGAGAGCA	GGACGGCGGC	300
TTCGGCAGCT	CAGGATCCAC	CCCNCGGACA	GCGTCGACAA	GTTCCCTGAA	ATGGCGGCCG	360
CTGCTTCCCT	GTACTCANAN	TCCACCCCCC	GAATTCTAGA	CCTGCCTCGA	G	411

(2) INFORMATION FOR SEQ ID NO:600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

GAATTCGGCC	TTCATGGCCT	AATTAAGCCT	GCCTACTTCT	ACAATGCATT	CTCCTACCTA	60
TTTGAACAGT	ATGTTTGTA	CTATGGCAAT	GAAGTCAGTA	GATAGGAAAC	CAGTTATTC	120
TTCTACCTTT	AAAAATTTTG	AGAACTTGCC	AACCAGGGAC	TAAAGCTATT	ATCTTGAACA	180
GAGTCCCTAA	AGCTAGTCTA	GTTTTTGCCA	CATCTGCAAT	GATTATTGTT	TAATTTCAAA	240
AGAATCCTCA	GGCTCTACAA	TCTAGGGGTG	GTAAATGTGT	TTCCACTATA	CTTGGGACCG	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:601:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

GAATTCGGCC	TTCATGGCCT	AGGAATCTCC	TCTTAAACCA	GGTGAAGTGG	GAAAGCAGGG	60
ACCATAACCAC	CCTGAGTGAC	ATCTACCTGA	ATAATATCAT	TCCTCGATT	GTACAAGTCA	120
GCGAGGACTC	AGGAAGACTC	TTTAAAAAGA	GTAAAGAAGT	CGGCCAGCAG	CTCCAAGATG	180
ATTTGATGAA	GGTCCTGAAC	GAGCTCTACT	CGGTCATGAA	GACATATCAC	ATGTACAATG	240
CCGACAGCAT	CAGTGCTCAG	AGCAAATAA	AGGAGGCGGA	GAAGCAGGAG	GAGAAGCAAA	300
TTGGTAAATC	GGTAAAGCAG	GAGGACCGGC	AGACCCCATG	CTCCCTGAC	TCCACGGCCA	360
ACGTTTCGCAT	TGAGGAGAAA	CATGTCCGGA	GGAGCTCAGT	GAAGAAGATT	GAGAAGATGA	420
AGGAGAAGCA	CCAAGCCCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 585 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

GAATTCGGCT	TCATGGCCTA	CAACATGTCA	GTTTTTTTTT	TCATTTTCCT	CAATATTTTT	60
CTTCTNGCTT	TCTCTCTCC	TGGTTCCCAG	CCTCTACTCA	ATAGTCCCCC	CAGCTTTGTG	120
TGCTGGTCTC	GGGGCTTCAT	GGAGATGAAT	GGGCGGGGGG	AGTTGGTGGA	GTCACCTAAG	180
AGATTCTGTG	CTTCCACGAG	GCTTCCCCCC	ACTCCTCTGC	TGCTATTCCC	TGAGGAAGAG	240
GCCACCAATG	GCCGGGAGGG	GCTCCTGCGC	TTCAGTTCCT	GGCCATTTTC	TATCCAAGAT	300
GTGGTACAAC	CTCTTACCCT	GCAAGTTCAG	AGACCCCTGG	TCTCTGTGAC	GGTGTCAAGT	360
GCCTCCTGGG	TCTCAGAACT	GCTGTGGTCA	CTTTTCGTCC	CTTTCACGGT	GTATCAAGTA	420
AGGTGGCTTC	GTCTGTGTTA	TCGCCAACTA	GGGGAAGCGA	ATGAGGAGTT	TGCACTCCGT	480
GTACAACAGC	TGGTGGCCAA	GGAATTGGGC	CAGACAGGGA	CACGGCTCAC	TCCAGCTGAC	540
AAAGCAGAGC	ACATGAAGCG	ACAAAGACAC	CCCACACATC	TCGAG		585

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

GAATTCGGCC	TTCATGGCCT	AGTCTGGTAG	TAAGGTGGAG	TGGGTTTGGG	GCTAGGTTTA	60
GCTCGGGGGA	GGTGGTGTG	GGGGCCGCAG	GCTGCGCGGT	GCCTGGGTAC	ATCTCCAGGC	120
CCACGCCCCG	GGCTTGGGAA	GTCAATCCCA	TGTCTCTGCG	CCGTGCAGCT	TTCAAGATTT	180
GCCGAAAGGC	TCCCAGAGCT	CTGTTTTTAA	TGGTGAATCC	ATCTTTAGAA	AGAAGCGTGA	240
TTCTCCTTGA	AGTGAGCCTG	GCATTTGTCA	GACAGGAAAC	TCCCAGGAG	GAGCACCTGT	300
GGTGGTTTGG	GTTGGGTTTG	TTAACTGCAG	AGAGTGGGAA	GAACAGATGC	TCCTCACACC	360
GTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 604 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

GAATTCGGCC	TTCATGGCCT	AGGAAAGACC	ATCAGCCTGG	GAGTCAGTGA	ACCTGACTCT	60
GATCCCAGCT	CTGCCTCCAN	TCAGCTGTGT	GATGACAGGT	AGGTCACCTT	CCCTCTCTGA	120
GCCACAGTTT	ATCTGTCTGT	AAACAGGGGT	ATTGGACTGG	ATTCTCTGTT	ATCTCTCATG	180
TCTCTGTGAA	AGGTCTGTGT	TTTCAAATAC	TCCTTAGGGA	CATGACCTCA	CATAGAAAGA	240
GGGGGTGCCA	CGAACTGGAT	TCCCAGCACT	CCCCCTTCCC	AGCTCTGCTC	AAGCTGAGGG	300
ACCTTGGAAC	ATGGTACTTG	GACCTAAGTA	CTCTCTCTGG	GCTTCAGTGT	CCCCAGCTAT	360
AAAATGGGGG	AAATGCCTAA	CTCAGGAGGT	TGAGGTAAGG	ACAAAAGGAA	TTAATACATG	420
GAAAGTGCCT	GGAACAGTGC	CTGGCACAGT	CTGCTTTTCA	AAAAAGCTGC	AAGGTGGCTA	480
CTCTCAGCAG	ATATAAGTTA	ATGCAGGAAC	AGCAACTAGC	AGCTCTTGGA	CATGCAATAT	540
ATTATATATT	TTTGCATCT	TTTACCCTTC	ACGGCACTGA	GCCTCACAAT	CCGTGACCT	600
CGAG						604

(2) INFORMATION FOR SEQ ID NO:605:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

GCGCAGCCAG	CGCCTGCCTC	CGACTCGACT	CCACACCTGC	TTGCTACAGC	GGGTGAGGAA	60
GCAGGAAAGG	GGGAGGGAGG	GATGTCGTCT	GGATTCCTGT	AATAATTTGT	TTCATTGTTT	120
CCAATCGACT	TAGTCACCAG	GTTAAATAGT	AGCATAGACC	TTTCAAAAAA	GTAGCTAGCT	180
TATAAGTAGA	TGTATTGAAA	ACACCTGCTT	GTTGAGTCGT	AGACAATTCC	TCATTACTG	240
TGTGAACTCT	AGGGGGTGAA	ACACGGGCGG	AGAGCGGCTG	TGAGCTCAGC	CGGCTCCATC	300
CCCACAGCGG	CCGAGGGTCA	CTCGGGGCCA	TTAATCAGGC	CGCAGAGCTG	CCCTCTGAGC	360
CGGGCCGCCA	GCGCCACAG	GGCCAGACC	AGGGCTCCCT	GGGCGGGATG	TTTTAAATCG	420
CACAGGGACA	AAGGAAAGGA	AAGACGCTGG	GGCCAAGCC	CGAGCTTATG	AAACGTTATC	480
AAGGAGCGAC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GAATTCGGCT	TCATGGCCTA	GACTTCCAAG	GACATGCTTC	GAAGCTCTGGC	CCAAGCCAAG	60
AAGGAATGCT	GGGATCGGTT	CCTCCAGGAG	AAGTTAGCTT	CAGAGTTCTT	TGTGGATGGA	120
CTTGATTCTG	ATGAGAGGTG	ACTACAATTG	CAAAGTAGAA	TTTGCTTTGA	CACCTGATGC	180
CAGGACAATA	GTATGTTACC	ATCCTTCTAT	AGACATTCCA	TATGAACGCA	CAAAACCTAT	240
CCCTTGACCA	GATCCTGTGT	ATAATAATGA	AGAAACACAT	GGTCAAGTGC	TGAAAACCTAG	300
AGAAGAAAAA	AGTGAACACC	TGGAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 632 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GAATTCGGCC	TTCATGGCCT	ACTGCCTCGG	CCTCCCGAGT	AGCTGGGACC	ACAGACGCCC	60
ACCACCATGC	CCGGCTAAAT	TTTGTATTT	TTAGTAGAGA	CGGGTTTCAC	CGTGTTAGCC	120
AGGATGGTCT	CGTTCCTCCG	ACCTCGTGAT	CCGCCCGCCT	CGGCCTCCCA	AAGTGCTGGG	180
ATTACAGGCG	TGAGCCAACT	CGCCCGGCCA	GGAATCCCTC	CTCTGTCTGA	CCTAACTGCC	240
CTCTGCCCTG	GAGCTGCTCA	GCCTCTATCA	ATTTTTCTGG	CTCTCAGCGA	ACGTTTTTCAT	300
TCAGTTGCAA	GACACAGAAA	CTCAAATTCA	AACCTGCTTA	CACAAAATAG	TGAATGTACT	360
GGCTCATGCA	CTTTTAAAG	AGATGAGGTC	TGTTGTGCTG	CCCAGGCTGG	ATGTGAACTC	420
CCGGGCCCAA	GAAATTCTCC	TGCCTCAGTC	TCCTGAGTAG	CTGGGACCAC	AGGAGCATGA	480
CTGTAAGTCC	TGGTGTGAAT	CAGGCTCCAG	AAACAGCTTG	ATCCTGGTTC	CCAACAGTAT	540
GGTCAAAACT	CATTCTCTCT	TCTGTCTTCT	TCTCTATGAC	AGGTGCTCCC	TAAGAAGTGA	600
CAAAGAAGGC	CACTAACAGC	TCTGGGCTCG	AG			632

(2) INFORMATION FOR SEQ ID NO:608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

```

GTATNGTGA AAATAAGAAA AAATATTCT GAAATTCGGG AACTTGAGAA CATAGAAGAA      60
CACCAGTCTG TAGATATTGC AACTTTGGAA GATGAAGCTC AGGAAAATAA AAGCAAAATG      120
AAAATGGTTG AGGAACATAT GGAGCAACAA AAAGAAAATA TGGAGCATCT TAAAGTCTG      180
AAAATAGAAG CAGAAAATAA GTATGATGCA ATTAAATTCA AAATTAATCA ACTATCGGAG      240
CTAGCAGACC CACTTAAGGA TGAATTAAAC CTTGCTGATT CTGAAGTGGA TAACCAAAAA      300
CGAGGGAAC GACATTATGA AGAAAAACAA AAAGAACACT TGGATACCTT AAATAAAAAG      360
AAACGAGAAC TCGATATGAA AGAGAAAGAA CTAGAGGAGA AAATGTCACA AGCAAGACAA      420
ATCTGCCAG ACGTATAGA AGTAGAAAAA TCTGCATCAA TTTTGGACAA AGAAATTAAT      480
CGATTAAGGC AGAAGATACA GGTAGACAT GCTAGTCAAG GAGACCTCGA G              531

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(2) INFORMATION FOR SEQ ID NO:609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

```

GTGACTTTGG AACCTTGAGA GTTAGATGAA TAAATCAGAA AAATGGAATT AAATGTATCT      60
ACTTTATTAT TGGTAAATCT GGTTAGGATG TGCAGCCCTA ATCAGGCTTC CTTAATTCCT      120
TCTCCACTGA GTCTGGACCA GCACTCTCCA GTAGAACCTT CTATGATGAC GGAATCCTC      180
TGTGTCGCG CTGATCAGTG TGGTAGTTAC TGGCCACATG TGGCTGTTGA ACTCTTGAAA      240
TGTGGCCAGT GTGGTGATGG AATTGTGTTT TTAATCTTAT TTAATTTAAA TTTAAATAGC      300
CAAATGTGGC TAGTGGCTGT TGTACTCGAG                                330

```

(2) INFORMATION FOR SEQ ID NO:610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

```

GTGGAGGCTT TCTTGATCAT GGATGGTGAA GATATACCAG ATTTTCAAG TTTAAAGGAG      60
GAAACTGCTT ATTGGAAGGA ACTTTCCTTG AAGTATAAGC AAAGCTTCCA GGAAGCTCGG      120
GATGAGCTAG TTGAATTCCA GGAAGGAAGC AGAGAATTAG AAGCAGAGTT GGAGGCACAA      180
TTAGTACAGG CTGAACAAAG AAATAGAGAC TTGCAGGCTG ATAACCAAAG ACTGAAATAT      240
GAAGTGGAGG CATTAAAGGA GAAGCTAGAG CATCAATATG CACAGAGCTA TAAGCAGGTC      300
TCAGTGTTAG AAGATGATTT AAGTCAGACT CGGGCCGAAC TCGAG                    345

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(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

```

GAATTCGGCC TTCATGGCCT AAATGACCAN ATCGAGAGGG AGGACTATGA GGACTTTGAG      60
TACATTCGGC GCCAGAAGCA ACCCAGGCCA CCCCCAAGCA GAAGGAGGAG GCCCCAGCGG      120
GTCTGGCCAG AGCCCCCTGA GGAGAAGGCC CCGGCCCCAG CCCCAGGAAG GAGGATTGAG      180
CCTCCTGTGA ACCTCTGCTG CCCCCGCTGC CCCCTGACTA TGGTGATGGT TACGTGATCC      240
CCAACTACGA TGACATGGAC TATTACTTTG GGCCTCCTCC GCCCCAGAAG CCCGATGCTG      300
AGCGCCAGAC GGACGAAGAG AAGGAGGAGC TGAAGAAACC CAAAAAGGAG GACAGCAGCC      360
CCAAGGAGGA GACCGACAAG TGGGCAGTGG AGAAGGGCAA GGACCACAAA GAGCCCCGAA      420
AGGGCGAGGA GTTGGAGGAG GAGTGGACGC CTAAGGAGAA AGTCAAGTGT CCCCCATTG      480
GGATGGAGTC ACACCGTATT GAGGACAACC AGAAGCGAGC CTCCTCCATG CTGCGCCACG      540
GCCTGGGGGC ACAGCGCGGC CGGCTCAACA TGCAGACCGG TGCCACTGAG GACGACTACT      600
ATGATGGTGC GTGGTGTGCC GAGGTCATC GAG                                     633

```

(2) INFORMATION FOR SEQ ID NO:612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

```

AAATACTAGA GATAAAGTAG ATTCATGGCT TGGTAAGGAA ATTTAAGCA TTCCTTCAAA      60
GATTGACGTG CTAAAATAAG CATTGATGTT TTGAGTTTTT TTACACCTAG GATTTTTAGC      120
TTGGGTGTGT AGGTGAAGGC CAAGACTCTC TGCAGGAAAA AGCTTATTTT CAAACTCAGA      180
AAATAAAATG TCAATCATAA AAATCTACTT CAACTTTAGC AAAAAGAAAA AAAAAATCAA      240
CAAAAAGTAT ACTCTGTATG CTGGGATTCC GAGGTTCCAA CACACTGTTA CTCGAG       296

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(2) INFORMATION FOR SEQ ID NO:613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

```

GATCCAGTGC TGCAGCTTCC TTACTATGAA ATGACAGCTC CACTTCCTAA TAGTGCATCC      60
GTGTCTTCCT CACTGAATCA TGTTCCAGAT CTTGAGGCTG GACCCAGCTC ATATAAATGG      120
ACTCACCAAC AACCAAGTGA CTCTGACCTT TATCAGATGA CAGCTCCACT TCCTAATAGT      180
GCATCCGTGT CTTCTCACT GAATCATGTT CCAGATCTTG AGGCTGGACC CAGCTCATAT      240
ATAATGGACT CGCCAACAAC CCCTCGAG                                     268

```

(2) INFORMATION FOR SEQ ID NO:614:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```

GGTGAAACT ATCCAAGAGG CCTTCTGAAT TCCTCTGACA TATATTTGAG AAAGTGGGCT      60
ACTGAAAGCC CTAACCCAC TTGGCTGCAT TTTATTTGGT AACCAGTGAG GCAAACACCC      120
TTGCCAGACC CCTACCATCC ATCTTGATGT GGTTCCTGCA CTGGACACTG CTTGGGTACG      180
GGCCTGCCCA GATCTTGGGA ATGTGGGCAG TGGCTCTCT GAAGCACCAG TGGGCAGAGG      240
ATGAGTCATG GTATCCTCCC GGCACCTCG AG                                     272

```

(2) INFORMATION FOR SEQ ID NO:615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```

GAATTCGGCC TTCATGGCCT AGTATTTTGT TAGAGACGGG GCTTCAGCAT ATTGGCCAGG      60
CTGGTCATGA ACTCCTGACC TCAGGTGATC CTCCTGCCTC AGCCTCCCAA AGTGCTGGGA      120
TTACAGGCAT GAACCACTGC ACCCAGTCAA GGGTATAAAA TTTCTACACA GCACAGGCAG      180
ATTCTGGCTG TGGAAGACCC CAAGATTCTT TGGAATTGTG ATGCTTTATT TAATTTAGAG      240
ATTATCTTCT CTGTCCCACT CTTCCCTTC CTAAAAAGGA CTAGATGCTT GCTGCTTAAT      300
TAGTAAAGCA AATTTAAGAT AATTTCTGCT TTTGAGATT AGGGATAGAT TTTTAAACAT      360
AGTCTTGCTG ATAATGATAG ACATCCTGGG ATGTTGGAAA TTAGGAAACT TGAACTTTGA      420
TTTGACACAG CTGAGAATTA TGAAGTAGGA AAAGTTAGAG GATCAGAAAA AATAAATTTA      480
TAAATCACAA GCTAGGCTTG GCAATATGAG TGGCGCTCGA G                                     521

```

(2) INFORMATION FOR SEQ ID NO:616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 577 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```

GAATTCGGCC TTCATGGCCT AGATTGGAAG GTGTGGTAGG CAGAATTCTG GCCCCATGA      60
CTGCCCTTTC CCTCACACC CCCCAGGTTG CTCCAATGGT TATGTCACGT TGCTTGGCAA      120
AAGGGACTTT GTAGATGTCA TAAAAGGTGA CTAATCAGCT GACTTGAGAG AGTTTATCCT      180
GGATTATCCA AGGGGCCAG TGTAATTCCA AGAGCCCTCA AGAGCAGAGC TGGAGAGATG      240
CCGCGCAGGA GGCCTGGGTG CCGTTTCGGA GCAGGATGGA AGGCGGTGAA TCCCGCTTCC      300
AGCATGGAGC TCGGGAGAGG CCCTGACTGC AGATGGAGAG GCTGCCCTGG CCGCAGCGCA      360
CGGGGCTCCT GACCCACAAA AATCGCGAGA TAATGAGTTC ATGTTGTTG AAAGTCCGTC      420

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ATTTCTGGTA ATTTGCTATA TAAAACTATT GCTATACGAT TAAAACTAA TACAGAAGAA 480
 TATTTCTTTA ACATTATGTT AAAAAGGAAA AAAGCTAACA TTTTCTTTAT AGCAAAACAC 540
 TGCCATGATT TACATTAAAA TTAGGAACAT ACTCGAG 577

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC TTCATGGCCT AGCACATACA GTATAAAAAA TAATCACCCA CCATAATTAT 60
 ACCAAATTCC TCTTATCAAC TGCATACTAA GTGTTTTCAA TACAATTTTT TCCGTATAAA 120
 AATACTGGGA AAAATGATA AATAACAGGT AAGAGAAAGA TATTCTAGG CAATTACTAG 180
 GATCATTGAG AAAAAGTGAG TACTGTGGAT ATTTAAAAATA TCACAGTAAC AAGATCATGC 240
 TTGTTCTTAC AGTATTGCGG GCCCTCGAG 269

(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC TTCATGGATT CTGCTTTGAA TATAGCTACA GAAATAAAGG ATGGACTACA 60
 ATGTGGGACA GTGTCTTCTC AGAAACAACC AGCCTTGAAG GCTACAACCTG ACGAGGAAGA 120
 TTCTGTTTCG AATATAGCCA CAGAAATAAA GGATGGAGAA AAATCTGGGA CAGTGTCTTC 180
 TCAGAAACAA CCAGCCTTGA AGGCTACAAC TGACGAGGAA GATTCTGTTT TGAATATAGC 240
 CACAGAAATA AAGGATGGAG AAAAATCTGA GACAGTGTCT TCTCAGAAAC AACCAGCCTT 300
 GAAGGCTACA ACTGACGAGG AAGATTCTGT TTGATTATA GCCACAGAAA TAAAGGACGG 360
 AGAAAAATCT GGGACAGTGT CTTCTCGGAA AAAACCAGCC TTGAAGGCTA CAAGTGATGA 420
 GAAAGATTCT TTTTCGAATA TAACCAGAGA AAAAAGGAT GGAATCGAG 469

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCGGCC TTCATGGCCT AGTCCGTGTT GTGGTCAGTG TGTGAACTCC AACTGGACA 60
 GTAGCTGAGT TTGGGCAGGG ATGAGGAGTG GAGGGGTGAG GTCTAAGGTT CAGAAAAAGT 120
 TTGTGTTTAA GAACTTGGTT AACTGGAGT CAGTTGCAGA CCAGAATGGA GAAAAGCACT 180
 CCTGACTTGA GTTGGGTGTG CTTGGGACTG GATCACCTTT GACCTTCTTT ATTTACCTAA 240

TTGGAGGGAA	GAGCAGGGGA	GGCAACACTA	TTTCTCTTGG	GTGTTAGAAG	AAGATTGAG	300
CTTATTTGGG	CACTGGTCTC	TATCTTTGCC	TTGAGCTGAA	TCAACATCTA	AGATGTTTTA	360
GATGCTTAGC	TAATTCCTCT	TAAAAAAGA	ATAAGCAGAG	GCCGGACGTG	GTGGCTCATA	420
GCTGTAATCC	CAGCAGTGTG	GTCTCGAG				448

(2) INFORMATION FOR SEQ ID NO:620:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

GAATTCGGNC	TTCATGGCCT	ACTTAAATCC	ATCAAGTTAC	ACAATCGATC	TGTTGTCAGC	60
TGAACAGAAC	CACATTAAAT	TTAAGCCAAA	CACACCAATA	GGAATGTTGG	AGGTAGAGAA	120
GGTAATTTTA	AAGCCAAAAA	TGTTGGATAA	GAAAAAACCT	ACACCTATAA	TACCAGAGAA	180
AACTGTGAGA	GTAGTGATTA	ATTTTAAGAA	AACACAGAAG	ACCATAGTGA	GAGTGAGTCC	240
ACATGCATCG	CTTCAAGAGC	TGCCCCCTAT	TATATGTAGC	AAATGTGAGT	TTGATCCGTT	300
GCATACACTA	TTGTTGAAAG	ATTATCAATC	GCAGGAGCCT	CTTGACTTGA	CAAAATCTCT	360
TAATGACCTG	GGACTAAGAG	AATTATATGC	GATGGATGTC	AACAGAGAGT	CCTGCCAAAT	420
ATACAAAAAC	CTAGATATTA	TGAAGGAGGC	CCTCGAG			457

(2) INFORMATION FOR SEQ ID NO:621:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 287 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

GAATTCGGCC	TTCATGGCCT	ACTCTCTGAT	TTACAGATTG	CTAATTAAAT	GGCTATTATT	60
AGTTTGGATT	AATTAGACTT	AAGAAAACAA	CTAACTGAGG	GTTTTTTTGG	TTGTGTTTTT	120
GAGGGTTTTT	TTTGCAATGAG	AATTGTATGT	AACCAGTGAT	ATGATTATTC	CTGAATGTAC	180
AGACAGAAGT	AAGCCTGGAC	ATTGTTAAAT	AGTCCCTGCT	TTAAGGGACT	ACGATAATGT	240
GTACTATGAC	AAACGTGCTT	TATTCTTCTA	ACGCAGTAAG	TCTCGAG		287

(2) INFORMATION FOR SEQ ID NO:622:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

GAATTCGGCC	TTCATGGCCT	AGTAGGTGTA	TCACAGATTT	CTAATGTAGA	ATGGTCAGTC	60
CAGGAGTAAT	TGTAATTGTG	GAAAAATGGA	GAATTATAAA	ACAAGAATGA	TGTGCAAAAA	120
AGGACACAGT	TGAATTCATC	TGTGTTCTCT	TAACTATTT	CATTTACTCA	TTCATCCAAG	180

TTTTGAAAAA	TGTTGGGAGT	CTGAAAAATT	CCAGGCACTC	TGCATAAATG	AGTATGGAAG	240
AATCCTCCAA	AAGAACTTTT	AGTCTACAGG	GGAACATTAA	TAAGCAATCA	GGGACTTGAG	300
ACCTACAGTG	CTGTGGAAGA	TTCTCGAG				328

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

GAATTCGGCC	TTCATGGCCT	AGGACGTTTG	GGTTGTTTCC	ATCTCAAATA	AATAAATAAA	60
TAAAAGTCTA	TAAAACAGC	TGGGCCCAGG	CATTTAAAAA	AATGTTCGGT	CTTCTAGTTT	120
AGTCTTTTAT	TGCTATGCA	AATTCTTTGG	CTATTGAAC	ATCCAAGCTT	TCTCTTTTAA	180
AGCTTTTGGG	GATAGGTTG	CAATACATTT	CTTGCTCTACT	GTTTCTCTTA	GTGTTTTCTA	240
ATTCTAACCC	ACGTTTGTG	GAATTTCTAT	TAGATGGTTT	TGCAACTTCT	GCATCTATCC	300
TCCATGCACC	TTACATTTT	CTTCACAGTT	TTCTGCTGT	TTTCTTGTG	TGCTACATTC	360
TGCACAGGAC	TCGAG					375

(2) INFORMATION FOR SEQ ID NO:624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 763 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

GAATTCGGCC	AAAGAGGCCT	ACCTCAAAGG	ATTGGCTAAA	AGCAAGCAAC	TGGATTGAAC	60
ACCCTAAGAA	GAAAGATTCA	CACTGCACCA	GGAGACATCA	GAAAGAATGA	AAACTCTGCC	120
GCTGTTTGTG	TGCATCTGTG	CACTGAGTGC	TTGCTTCTCG	TTCAGTGAAG	GTGAGAAAG	180
GGATCATGAA	CTACGTCACA	GAAGGCATCA	TCACCAATCA	CCCAAATCTC	ACTTTGAATT	240
ACCACATTAT	CCTGGACTGC	TAGCTCACCA	GAAGCCGTTT	ATTAGAAAGT	CCTATAAATG	300
TCTGCACAAA	CGCTGTAGGC	CTAAGCTTCC	ACCTTCACCT	AATAACCCCC	CCAAATTCCC	360
AAATCCTCAC	CAGCCACCTA	AACATCCAGA	TAAAAATAGC	AGTGTGGTCA	ACCCTACCTT	420
AGTGGCTACA	ACCCAAATTC	CATCTGTGAC	TTCCCATCA	GCTTCCACCA	AAATTACTAC	480
CTTCCAAATG	TGACTTTTCT	TCCCAGAAAT	GCCACCACCA	TATCTTCAAG	AGAAAATGTT	540
AACACAAGCT	CTTCTGTAGC	TACATTAGCA	CCAGTGAATT	CCCCAGCTCC	ACAAGACANC	600
ACAGGTGCCC	CACCCACACC	TTGTGACAAC	TACACNAGCT	CCACCATCTT	CCTCAGCTCC	660
ACCAGAGACC	ACAGTNGCCC	CACCCACACC	TTTTGCAACT	ACACNAGCTC	CACCATCTTC	720
CTCAGCTCCA	CCAGAGACCA	CAGCTGCCCC	ACCCATCTTC	GAG		763

(2) INFORMATION FOR SEQ ID NO:625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

GAATTCGGCC	AAAGAGGCCT	AGTAGTTTCT	ATGTGCGGTC	TGGGGTGGGG	GCAAGGCCCT	60
TGTGTTCCAC	TGGTTTCCAC	CACGTTGACA	GCAGTCGCTG	GCAGCAGAGA	GCCATTTCTT	120
GTCATGCTGG	TCTGTTCCAG	GACTCTGTGG	AAGATTCTCT	ATCTCCACTG	GCACAGGAGC	180
AGAGGAAATG	GAAGGACTCA	CAGGCAGAGC	AGATCTCATC	CCCCAAGCCT	GTTGGGAGCC	240
ATTACTTTGG	GTCGAAACAT	TATTGTGAAC	ACTAAGTTCT	TCAGGTTTGG	TAGCACATGC	300
TTTCAATTGT	AGAGTTTCGT	TAGAATATCG	TTTGCTGGGC	CTTCTTTCAA	AGGATGTTGA	360
TCTTCTTGCT	TTATTGGTTT	TTGTGGTCTG	ATACTCTGTT	TTCCCACTAT	ATCTAAATCG	420
TGATCCTAGT	CGAATAAATC	CTGATCGATG	AGAACTCTTT	TGGACGGGGG	CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:626:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 234 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GCGATTGAAT	TCTAGACCTG	CCTCAACTGT	CTGGTTTCCT	GTAAATATAA	CACATTGTTT	60
TATATTTTAA	GGGAACAAAA	AGTGCTGCTA	TAGGGTTCAA	AGTTTTCTCT	CTGAACACTT	120
TTCCGAAACA	AATTACCCCA	AAGACACATT	TTGAATATCC	TGGTCACATC	TTTGATCTG	180
TAAATATAC	CTTTAGTAT	GGCACCTGTT	AAAATGCAAA	GCAAAAACCT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:627:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 583 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTC	AATCATTCAG	CATAAGGAAC	TGTCAATATT	60
TTTTTGAGCT	GTCAGAAATC	CATTTAGTGA	TTTTCGACAA	TTCAAAAAAA	TATTTCTGAC	120
CGCTTGATTC	AGTTCCTAGT	GAATTAGGGA	AGAAGAGGAA	TAAAAGAAAT	ATATCAATCT	180
AAATTATGAA	CCCAGAGTCT	AGCTTCCTGA	ATTCTTCTCT	GTGCTTAAAC	GAACAACAGG	240
ATGTTGAGGT	TCAAAAATAC	TCTCTTCTAT	TTCCCCCCTT	TCCTTCCCTT	TTCTTTCTTT	300
CTCTTCCATT	CCTCGAAAAG	ATAATAAAAC	AGAATGTGCC	TAGAGCTTCT	GGAAAGAATA	360
CAGTCTGCT	GATACTAGAA	CTCAGTGAAA	TTTGCACCAG	ATTTCTGAGC	TACAGAACTG	420
AAGATAATTC	ATTTATTTC	AGCCACTGAG	TTTGTGGTAA	ATTTGTTACA	GTAGCAATAA	480
AAATCTAATA	CATGCCTTCT	ATACCAGAAG	TACACATCCA	CGTGACCATT	CCTGTCTCTA	540
CCCCACACAC	ACATACACAC	ACACACACAC	ACGCACACTC	GAG		583

(2) INFORMATION FOR SEQ ID NO:628:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 295 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

GAATTCGGCC	TTCATGGCCT	ACCTGCCTCG	AGTTCCTACT	GCCCCCGGGC	GGCCTGCACA	60
GAGCTGCTGC	CCTCCAGAGA	CTGTGAATCC	CAAGCCTGAC	TCAGTGGACT	GCTTCCTGTT	120
CCCCCTCCCTC	CTCTTCCTCA	CCTTGTCTTG	CACCCTCAAG	CCTTTCTCCA	ATGCCTCCCA	180
GGAGGATTTG	GGGACTTTCT	CCCTGGGGCG	CCCAGATCCA	GCTCGGAGGC	CTCACTGGGA	240
CCTGGCAAGG	CCTGACCTCC	CGCCCCAACT	TGCTTCTGTA	GCCCCCCTAC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

GAATTCGGCC	TTCATGGCCT	AACCTGTTGC	TTCCCTGGG	ACTGAAGGCA	GAAGTGA CTC	60
CCGAAATTCT	CTTCTGGAC	TCAGAAGGAA	ACCAAAGCAA	TTGATGACAC	CGCATCCCAT	120
ACTAAAAGCT	ATGGAAGAGA	GAGCAATTCA	ACGAGCTGAA	TGTAGGCGGA	TCTTGGCAGA	180
GAAGNAGAAA	AAACAAGAAG	AAGANAAATT	GGCCCAGTTA	AAGGCCCAAG	AGGAGGAACG	240
TCAGAAAAGG	GAGGCAGAAG	AAAAGGAGGC	ACAGCTTGAA	AGAAAACGAG	AAGAGAAGAG	300
ACTGAAGAAA	ATGAAAGAAC	TTGAGAAGCA	GAAGAGAACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

GAATTCGGCC	TTCATGGCCT	AGTTCCTCCT	TAGGAACAAG	GGCAGGACCT	CAAACAGTCC	60
AGAGGAGAAG	CCTGGGGTGG	TCAGGGAAGG	CTTCCTGGCT	GAGAGGACAG	GCTTAGGGGC	120
ACCTTGAAAG	TTCAGGCTGA	CTGGGGCTAG	GGGCATGTGG	GTAACAGGTT	AAAGGGGGGG	180
GGGCTGGAAG	ATGCAGACAC	CAAAGACCCT	TCAATATGAG	GCCAAGAAAG	GAAGGTTTCAG	240
AACAGGGATC	ACTCGAG					257

(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

GTTCCAAATC	CATGGGAACC	AGCACAGGAG	CTACAGCAAA	TCATGGCACT	TCTGCAGTAG	60
CAATTACTAG	CCATGATTAC	CTAGGACAAG	AAACTTTGAC	AGAAATCCAA	ACCTCACCAG	120
AAACATCAAT	GAGAGAGGTG	AAAGCGGACG	GAGCTAGCAC	CCCCAGGTTA	AGAGAACAGG	180
ACTGTGGTGA	ACCTGCCTCG	CCAGCAGCAT	CCATCTCCAG	ACTCTCTGGG	GAACAGGTCTG	240
ACGGGAAGGG	CCAGGCAGGC	AGTGTATCTG	AAAGTGCGCG	GAGTGAAGGA	AGGATTAGTC	300
CAAAGAGTGA	TATTACTGAG	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:632:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

GAAAAAATGG	AAGAATTTGT	TTGTAAGGTA	TGGGAAGGTC	GGTGGCGAGT	GATCCCTCAT	60
GATGTACTAC	CAGACTGGCT	CAAGGATAAT	GACTTCCTCT	TGCATGGACA	CCGGCCCTCCT	120
ATGCCTTCTT	TCCGGGCCTG	TTTAAAGAGC	ATTTTCAGAA	TACACACAGA	AACAGGCAAC	180
ATTGGACAC	ATCTCTTAGG	TTGTGTATTC	TTCTGTGCC	TGGGGATCTT	TTATATGTTT	240
CGCCCAAATA	TCTCCTTTGT	GGCCCTCTG	CAAGAGAAGG	TGGTCTTTGG	ATTATTTTTC	300
TTAGGAGCCA	TTCTCTGCCT	TTCTTTTTC	TGGCTCTTCC	ACACAGTCTA	CTGCCACTCA	360
GAGGGGGTCT	CTCGGCTCTT	CTCTAAACTG	GATTACTCTG	GTATTGCTCT	TCTGATTATG	420
GGAAGTTTTG	TTCTTGCT	TTATTATTCT	TTCTACTGTA	ATCCACAACC	TATTCTCGAG	480

(2) INFORMATION FOR SEQ ID NO:633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

GAATTCGGCC	TTCATGGCCT	AGCGGGATCG	TATCACTACG	CACGTGGCGT	CAATGACAAA	60
GACGCCTTCC	CCACGGGACA	GGCCCTGGGA	ACTGCGGGGC	AAGGTGTGGG	CACGGCGGGT	120
CGCCTTCCAA	CCCTCCAGGG	TCTCCGGTCC	TGCCCCCTCT	CCAAGACCCA	GAGATTCTCT	180
CCATCCGGTG	CCTCCGGGAG	CCCAGGGTCT	GGGGAGTGTC	TGGCTATGGC	GGGGCGGGCTG	240
CTTTTTAGGG	GAGGGAATCC	AGCAATTGGG	AAACCAGATC	TGTTCTCCTT	CTTCCCTTCT	300
CCTCGAG						307

(2) INFORMATION FOR SEQ ID NO:634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

```

CCTCTGCAAG AAATGCCTAA GCGTATTATC AGGAAGTGGA ATTATAAAAT GTTTCAGAT      60
CAAATTAAGC ATCTACAGGT GAATTAATAT AGAATTAAGC TTAGAAAGCT TAAGTAGAAG      120
TTGAATGAAT TGTGTTTCATT CTTTGAAACC CATTGATTG CAAAACCAAT ATTCCACTGT      180
CTATAGGAGG CAATTCAGAC TGAAAATAAT TTAGAAAAAA AAATAGTCCA GAAAAAAAAA      240
TAGTTCTAGA GATAAATAGG TCATTTGAAG ACTAACCTCT GCCATTAGGG GTTCTAAAG      300
ATAGGCTGAC TCTATCTATT TAATAATTAT TTTGTTTCATT AACTCCTTGC ATATAGAATT      360
GTAAGTATA CCAGCCAGGT ACGGTGGCTC ACGCCTGTAA TCCCAGCACT TTGGGAGGCC      420
AAGCGGGGCA GATCACCTAA GGTCGGGAGT CTCTCGAG      458

```

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

```

GAATTCGGCC TTCATGGCCT ACCCACTCTC ACTTTGTACC TCTGTCAGTT ATCTCCTCTT      60
TACCCTTCTT TCAACGAGCA TACCACCGGC CCTCCAGCA CCTATGGCCC AAGCCAGTTG      120
TTTGCAAATT TTATACTGTG ACACAGGACA ATTTACACAC ACATACACAG TTCACTTGT      180
GACATACTTT TTTTGTGAGA TGGAGTCTCA CTTTCATTGCC CAGGCTGGAG TGCAGTGGTG      240
TGATCACACC TTATTGCAGC CTCAACTCC TGGGCTCAAG TGGTCTTCCT GCCTCAGCCC      300
CCCTAGTAGC CAGGATTACA GGCGTGCACC ACCATTCTC GAG      343

```

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GTGGATAACA AACAAACAAA TCTGATGCTC CCTGAGTCAA CTGTTTATGG TGATGTGGAC      60
CTTAGTAACA AAATCAATGA GATGAAAACC TTCAATAGCC CAAATCTGAA GGATGGGCGT      120
TTTGTCATC CATCAGGGCA GCCTACTCCT TACGCCACCA CTCAGCTCAT CCAGTCAAAC      180
CTCAGCAACA ACATGAACAA TGGCAGCGGG GACTCTGGCG AGAAGCACTG GAAACCACTG      240
GGACAGCAGA AACAGAAGT GGCACCACTT CAGTACAACA TCGTGGAGCA AAACAAGCTG      300
AACAAAGATT ATCGAGCAA TGACACAGTT CCTCCAATA TCCCATACAA CCAATCATAC      360
GACCAGAACA CAGGAGGATC CTACAACAGC ACAGAGCTCG AG      402

```

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

GCTTCCTCGC	AGCAAGCGGC	TGGAGATAGA	GAAGAGCTTA	CTGGTGCAG	CGTCCGTCGA	60
CCCCGTGCCC	GCTGACCTAG	AGATGGCAGC	CGGTCTCACC	GACATATTC	AGCATGATAC	120
ATACTGTGGT	GATGTCTGGA	ACACCAACAA	ACGCCAGAAT	GGCAGACTCA	TGTGGCTCTA	180
TCTCAAATAC	TGGGAACTCG	TTGTCGAACT	GAAGAAGTTT	AAGAGAGTAG	AGGAAGCCAT	240
ACTAGAAAAG	TAAGACAAGA	GTGAAATCAA	ACTGCTTTTA	GTGACTCGAG		290

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

GTCGAGAAAA	TGGGGATAAT	GGAGAAATTG	TGGGCAAGCT	GGCTTCCTGG	GAAGGGACTA	60
ATTGAACAAG	ACATGATTT	ATCTTTTCGG	GGTTCAGAGG	CAGCTTGTTA	ATTCTGAATTA	120
TTTTCTTTAT	TTTGCCCAAC	AAGTGTGTTG	TTGTCTTTT	CTCTGGCTTT	TTACCTGATC	180
AGGCTGCAAG	CTGCAAAGGT	GTGGCTTGTG	CTGCAGATTT	GTAATAAAAG	ATGACAGGTG	240
AGAGAGACAG	TGGTGGAACT	GGTAGAGCTT	GCACACCCAC	ACGGTGTGGC	TGCTCGGGAG	300
GCTGTCTAGT	GCACCTGCCA	ACAGAGCACA	GATATCCTCT	CTTCCTCATT	TCAGATTCTT	360
CCTTCCAGCT	GTTTACTAAA	CAGCAACAAA	AACACCTCT	TGGCTGTAAC	TTGTCAAATA	420
AAGTCCCTGC	AAAGTGATA	AGATTTTCCT	CCCCAACCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

GCGAGGGAGA	TGGCAGCCTG	GGCTTTAGCA	GCAGGGAGGA	AGGTGAANAA	AGAACCGGGG	60
CTTGACAGCAG	AGGTGGGTTC	TGCCTTAAAG	GCAGAGACCC	CCAACAACCTG	GAATGCCACG	120
GAAGACCAGC	ATGAGCCTAC	CAAACCTTTG	GTTGCGAGGG	CTGGAGCTAA	TTCTCGCTCC	180
AGGAGAAAGA	AGCAGAAGAA	GAACTCCAGG	CAGGAAGCAG	TGCCCTGGAA	AAAACCCAAA	240
GGCATCAATT	CCAACAGCAC	AGCTAACTTG	GAGGATCCTG	AGGTGGGTGA	TGCTGAAAGC	300
ATGGCGATCT	CAGAGCCGAT	CAAGGGCAGC	AGAAAGCCCT	GTGTGAATAA	GGAGGAGTTG	360
GCTTTGAAGA	AGCCCATGGC	GAAATGTGCC	TGGAAGGGTC	CCAGAGAGCC	ACCTCAGGAT	420
GCCCGGGCAG	AAGCCGAGAG	CCCAGGAGGC	GCCTCTGAGT	CAGACCAAGA	TGGTGGCCAT	480
GAAAGCCAC	CAAAGAAGAA	GGCCGAGCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:640:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

```

GAATTCGGCC TTCATGGCCT ACACCTCAGC CTCCAGAGCA GCTGGGACTA CAAACGTGTG      60
CCACCATGCC GGGCTAATTT TTGTATTTC AGCAGAGGTG GGGTTTCACC ATGCTGCTGG      120
CCAGGCTGGT CTCGAACTCC TGGCTTCAAG TAATCTGCCC ACCACAACCT CCCAAAGTGC      180
TGGGATTACA GGTGTGAGCC ACTGCGCCCA ACCAAGAGCT CCTTTTGTGTT TTTCTTTT      240
TGTGAATTCG GATTCTTTAT ATTCAAGAGT TTTACTTAAA CTTTGAATCT GAAAGAAACT      300
TTAGGAGGAG CTCATAGATT TGTGGGAAGA AGCAAATCTA CATTATTTTC TCTCTCTAA      360
AATCATATTC CATGTATTTT GATCTTTTAC TGAATTTTAA CACATTGTTT CACTACTAAC      420
ATAAAGTGTG TCAATAGTTT TTGTAAGTCA CACACAAATA CTGGATTTAA AAGTTATATA      480
CCTGAGTATA TTTTATGGC AGGTCTCGAG      510

```

(2) INFORMATION FOR SEQ ID NO:641:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

```

GAATTCGGCC TTCATGGCCT AGTGTTCCTA GCCAGTCTCT ATTCTCTCAC CTAACACTCT      60
CAAGGAGATA GAAGCTTCAG CTGAAGTCTC ACCCACCACG ATGACCTCCC CCATCTCACC      120
CCACTTCACA GTGACAGAAC GCCAGACCTT CCAGCCCTGG CCTGAGAGGC TCAGCAACAA      180
CGTGGGAAGAG CTCCTACAAT CCTCCTTGTC CCTGGGAGGC CAGGAGCAAG CGCCAGAGCA      240
CAAGCAGGAG CAAGGAGTGG AGCACAGGCA GGAGCCGACA CAAGAACACA AGCAGGAAGA      300
GGCTCGAG      308

```

(2) INFORMATION FOR SEQ ID NO:642:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

```

GAATTCGGCC TTCATGGCCT AGTTAGATGA AAATCTAAAG GATGAATACT TTGAGGAAAT      60
CATGGAAGAA TATGAAGATA TTAGACAGGG CCATTATGAG TCTCTCAAGG AGAGGAGATA      120
CTTACCCTTA AGTCAAGCCA GAAAAAGTGG TTTCCAAATG GATTGGCTGT CTGAACCTCA      180
CCCAGTGAAG CCCACGTTTA TTGGGACCCA GGTCTTTGAA GACTATGACC TGCAGAAGCT      240
GGTGGACTAC ATTGACTGGA AGCCTTTCTT TGATGTCTGG CAGCTCCGGG GCAACCCAC      300
TCGAG      305

```

(2) INFORMATION FOR SEQ ID NO:643:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:


```

GCGATTGAAT TCTAGACCTG CACCCAGCCA AACTGAGAG ATTTTAATGA GTACTTTTAT      60
CCACCTGACC ACCATCATTG CCTATCACCT GTCATTCTTC ATCCACCCTA CATCCATCCT      120
TCATCCCCCC ATCATCCACC CATCTATCCT TCATCCATCC ATTCATCATG GAACCATTAT      180
CCATCCAACCT ATCATCCAGC CAGCCAGAAA TGACCCATTC ATCTTCATCT CTCATTTTCCT      240
CTCTCTAAAC CAGTTCTTAA TCTGGGGCCA AAGTCTTACC CACACATCCC TTAGTCTCGA      300
G                                                                                   301

```

(2) INFORMATION FOR SEQ ID NO:644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```

GAATTCGGCC TTCATGGCCT AGATCCCCCG TGGAGAAAGC AGTGACACAT TCACACAGCT      60
GTTCCCTCGC ATGTTATTTC ATGAACATGA CCTGTTTTCG TGCACCTAGC ACACAGAGTG      120
GAACAGCCGT ATGCTTAAAG TACATGGGCC AGTGGGACTG GAAGTGACCT GTACAAGTGA      180
TGCAAAGGAG GGTTCCTAAG AAAAAGGATT TTGTTTAAAA TACTTTAAAA ATGTTATTTC      240
CTGCATCCCT TGGCTGTGAT GCCCCTCTCC CGATTTCCCA GGGGCTCTGG GAGGGACCCT      300
TCTAAGAAGA TTGGGCAGTT GGGTTTCTGG CTGAGATGA ATCCAAGCAG CAGAATGAGC      360
CAGGAGTAGC AGGAGATGGG CAAAGAAAAC TGGGGTGCAC GCCTCGAG                      408

```

(2) INFORMATION FOR SEQ ID NO:645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```

GAATTCGGCC TTCATGGCCT AGTTATGTGA TTAGGAGTAG GGTAGGATG ANTGGGAAGA      60
AGAAAGAGAG GAAGTAAAGT TTAATTATGC CTTTGTGGGT TTATTATCCC TGATGCATGT      120
GGCCCCCCAC TGCTGTGTCC TTCTCCTGTT GGCTAGGGTT AGACCACACA GGCTAAACTA      180
ATTCCGATTG GCTAATTTAA AGAGAATGAC GAGGTAAGTG TTTTGGCGGG AAAAATGGTT      240
ATGACAGAGC AGGTAATAGG AATGAGTTAG GGTGGAGTAG GTAATCGGAA TGAGTCAGGG      300
TGGAGCAGGT AATTGGAATG AGTCAGGGTA GAGCAGGTAA TCGAAAAAGG TTGCTTTGCT      360
CGAG                                                                                   364

```

(2) INFORMATION FOR SEQ ID NO:646:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

```

GAATTCGGCC TTCATGGCCT AGGAGTGCAT TTGGATCTAG TGTTCCTAT CAATCTGTCT      60
GCTGATGTGG CACTACTGCA CCATTTACCA CAACATTAGA ATATGTCTGA GTAACGGTT      120
GGCTTAGATT TTTTGCAATT AGTCCCACCC CATTTTCCAG AACTTTTCATG GCTATTCTTA      180
TATGTTTGTG TTCCGTAAGA TCTTTAGGAT CAATTTGTCT AGTTCTAAAG AGGAAATTCT      240
GATATTATTG ATTTAGTAAC TTTCCATGAA AAAAACCTAC CATCACAGGA AAGATGCACA      300
TTAATTACAG GTAGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:647:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

```

GAATTCGGCC TTCATGGCCT AGTCAGTGGC TAGATTGATT GATCCTCCAG AATTAGACAC      60
TCACATGTTA ACACCACTCT CAGTTGGAGG GCTGATAGTA AACCTTATTG GTATCTGTGC      120
CTTTAGCCAT GCCCATAGCC ATGCCCATGG AGCTTCTCAA GGAAGCTGTC ACTCATCTGA      180
TCACAGCCAT TCACACCATA TGCATGGACA CAGTGACCAT GGGCATGGTC ACAGCCACGG      240
ATCTGCGGGT GGAGGCGAGG TCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

```

GAATTCGGCT TCATGGCTAC TTTTGTAATA GCATACCCAA CCTTCAGTTA GAATATCTCC      60
TGATAATAAG AAAGATCTCA TTGAAATTTA TTAATCTTTT TGTGTCTAGT AGATAACTTG      120
GATGGCACAC AGTGCTTTGA TTTTACCTG CCCAGAATTT AACTCCTCAT CCTATCCTAC      180
ATGATTTTCT TTTTCTCTC CCCCTTCCTC TTTTATTCCA TGTCAGTGGG AATGGCAGGT      240
CTTGCAACCA GTAATGGCAG GTCTTGCAAC AAGCAAGCCA GAAACCTGAG CTTTAGTCTT      300
TATTCCTCCC CACTTCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:649:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 559 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

```

GAATTCGGCC TTCATGGCCT AGAGGAAGTG AACGGATGGG GCCTCATCCT CCTGCCTCCC      60
TAAAGGGTGA GGGTGGAAGG ATGGGGCTGT GCCCTCTTAG GGCAGGGAAA AACAGCTTGG      120
AGGGGTTTCT GCCATCAGAG ATCCCATAGG AGGCAGGTCA GTCCTGCAGA ATTTCTCCCC      180

```

```

AGTCTGGCCT CCAGCCTCCC TGGCCCCCTT CTAGAGGCCT CCATCCCACT GCGGGCTTGC      240
TCCTGCCACC GGGCCTCTGC ACAGTCACCT CCTGCAGCCT GGGGTGTGTC GCCTCTCCAC      300
GTCTTGATAT TTTTGCTGGA ATGCAGACGA TACTATATTT ACCGTATAAT ATATTATCAG      360
CTCTCCTATA TCTCAGTCAA TTTACATAGT TTTAAATAGA ACATCTTATT AAAAACATCT      420
AGATATACAC AGATTAGGAA ACGCTTACAA CATACAAATA CACAAACTAG AAATAAATCT      480
TTAGCATACT GGTATATACA ACAGTGTGAT ACAATAAATA ATTCATTCA TGCTCTATCT      540
ACACATCATA TTGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:650:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

```

GAATTCGGCC TTCATGGCCT AGGGAGACTG AGGCAGGCAG ATCACCTGGG GTCGGGAGTT      60
CGAGACCAGC CTGACCAGCA GGGAGAAACC CCGTCTCTAC TAAGAATAGA AAATTAGGTG      120
TGGCGGTGCA TGCCTGTGGT CCCAGCTACT CGGGAGGCTG AGGTAGGAGA ATCGCTTGAA      180
CCCGGGAGGC GGAGGTCATG GTGGGCCGGG ATTGCACCAT TGCACTCCAG CCTGGGCAAC      240
AAGAGTGAAA CTCCATCTCA AAAAAATAAA AGCCTAGCCT CCCAAAGTGC CAGGATTACA      300
GGCATGAGCC ACCGCGCCTG TCTGTCCGCC CGTCTTCTTT TTTAAGAGCA AGAAAAGGTT      360
TCCCAGAAAGT ACTCTGGTAG ATTCTTATCA CACACACATT CCTAAACCAG TTAAGGCAA      420
AGAAAATAGA ATTATCATGA TTAATTAGCA TATTCTGAAG NACATGCTTC CCTCGAG      477

```

(2) INFORMATION FOR SEQ ID NO:651:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

```

GTGTGAACCT ACGGGAAGGC GGCCGCCTGC ACCTCTGTGC GGAGACCAAG GATGATGCCC      60
TAGCATGGAA GACAGCACTG CTGGAGGCAA ACTCCACCCC GGTGCGCGTC TACAGCCCGT      120
ACCAAGACTA CTACGAGGTG GTGCCCCCA ATGCACACGA GGCCACGTAT GTCCGCAGCT      180
ACTACGGACC GCCCTACGCA GGCCCTGGCG TGACGCACGT GATAGTGGCG GAGGATCCCT      240
GCTACAGCGC CGGCGCCCT CTGGCCATGG GCATGCTTGC GGGAGCCGCC ACTGGGGCGG      300
CGCTGGGCTC GCTCATGTGG TCGCCCTGCT GTTCTGAGC CCTGGGACTC GGAGCACTGA      360
CCCTGCGCT TGGATTGCTA GACTCCTCTT CCTCCTGGAC CCCATCCTCT CGAG      414

```

(2) INFORMATION FOR SEQ ID NO:652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```

GAAGGAAAAC ATGGGCACAG GGGATTTTAT CTGCATTTC ATGACTGGAG GGGCGCCTG      60
GGGGTTCAGA TTGCAAGGTG GCAAGGAGCA GAAGCAGCCC TTACAAGTTG CAAAGATTCTG    120
AAATCAGAGC AAAGCCTCTG GGTCTGGGCT CTGTGAGGGA GATGAAGTGG TTTCCATCAA    180
TGGCAACCTT TGTGCAGATC TCACCTACCC TGAAGTCATC AAGCTCATGG AAAGCATAAC    240
AGACTCTCTC CAAATGCTCA TCAAAAGACC ATCCAGTGGA ATAAGTGAGG CTTTGATATC    300
TGAAATGAA  AACTCTAACC TCGAG                                     325

```

(2) INFORMATION FOR SEQ ID NO:653:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```

GAATTCGGCC TTC TGGCCT AGGTATTTAG GCTTTTGTCT TAACAGCAAA TCCTGGCTGT      60
CTGGGGCCTG ATGACTGTGT TCCATGGGTA TCCACTCCCT GTCCACAGTG TGGGAGCCCC    120
TCAGCTGCTT ATTGCAGGGA CACAGAGCCC GGCATGGTCC AGAAGGCGGG CTTATGGGGC    180
CTGCAGCACA CAGGGAAAGT GAGCCACAC TGTGATAGGA GGCAGACAC ACAGGATGTG      240
TTCTGTGTTA CAGGGTTGCC GTGAAGAATT TCATTCTTTT GCAAGGACTG GAGAGAAAAT    300
TTTATGTGGA AGGTAGCCCT TGGAAATGAC CTCAAAGAAT AGGTAGGATC TTAGCCTGCG      360
TTTGAAAGCC TGGAAAAAAA CAGGATGACA GGATGAAGAG GCCACAGCAC AGCTGCAGAC      420
AATGGGAGTG CGGAGATCTC GAG                                     443

```

(2) INFORMATION FOR SEQ ID NO:654:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```

GGGAGCGCCG GTGGTTCATC CTGACCGATA ACTGCCTCTA TTACTTTGAA TACACAACAG      60
ATAAGGAGCC CAGGGGAATC ATCCCGTTGG AAAACCTCAG CATCAGGGAG GTGGAGGACC    120
CCCGGAAACC CAACTGTTTT GAGCTCTACA ATCCCAGCCA CAAAGGGCAG GTCATCAAGG    180
CCTGTAAGAC GGAGGCCGAC GGCNGCGTGG TAGAGGGGAA CCATGTGGTG TACCGGATCT    240
CAGCCCCGAG CCCGGAGGAG AAGGAGGAGT GGATGAAATC CATCAAAGCC AGTATCAGCA      300
GATCCCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```

GGGGGATACG GATACCCAAA CTTCAATGTT CCTTGATAGT AGGAAGGAGG ACAGTTATAT      60
AGACCAAAAG GTGCCTTGCA CAGATTCACA AGTGCAGGTC AAGTTGGAGG ACCACAAAAT      120
AGTAACTGCC TGCTTGCCTG TGAACATGT TAATCAGCTG ACTACTGAGC CAGCTACAGG      180
GCCCTTTTCT GAAACTCAGT CATCTTTAAG GGATTCTGAG GAGGAAGTAG ATGTGGTGGG      240
AGATAGCAGT GCCTCAAAAG AGCAGTGTAAG AGAAAACACC AATAACGAAC TGGACACAAG      300
TCTTGAGAGT ATGCCAGCCT CCGGAGAACC TGAACCATCT CTCGAG                      346

```

(2) INFORMATION FOR SEQ ID NO:656:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 116 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```

GAATTCGGCC AAAGAGGCCT ACTAAACCGT CGATTGAATT CTCGAGGAG GTCTAGAATT      60
CAATCGACGG TTTAGGCTCC CTATAGTGAG TCGTATTAAT TTCAGAGGTG TATTTA      116

```

(2) INFORMATION FOR SEQ ID NO:657:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

```

GAATTCGGCC AAAGAGGCCT AGGGATGAGG GTGAAGAAGG GGAGAGGGTT GGTTAGAGAT      60
ACAGTGTGGG TGGTGGGGGT GGTAGGAAAT GCAGGTTGAA GGGAAATTCTC TGGGGCTTTG      120
GGGAATTTAG TGCGTGGGTG AGCCAAGAAA ATACTAATTA ATAATAGTAA GTTGTTAGTG      180
TTGGTTAAGT TGTGCTNGG AAGTGAGAAG TTGCTTAGAA ACTTTCCAAA GTGCTTAGAA      240
CTTTAAGTGC AAACAGACAA ACTAACAAC AAAAATTGTT TTGCTTTGCT ACAAGGTGGG      300
GAAGACTGAA GAAGTGTTAA CTGAAAACAG GTGACACAGA GTCACCAGTT TTCCGAGAAC      360
CAAAGGGAGG GGTGTGTGAT GCCATCTCAC AGGCAGGGGA AATGTCTTTA CCAGCTTCGG      420
TGGCTGGCAC GTGTTACCAG GCCGAGTGGG ATGACTATGT GCCCAAAC TG TACGAGCTCG      480
AG

```

(2) INFORMATION FOR SEQ ID NO:658:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGTCC CTTCTGTCCC AGTCGTTTCGT GCCTCTGTGC      60
CCACGCAACT CCAGCTTGTA CCATGCCGGT CAAAGGAGGT AGCAAGTGCA TCAAATACCT      120
GCTCTTCGGA TTTAACTTCA TCTTCTGGCT CGCTGGCATT CGAGTGCTTG CTATTGGACT      180

```

```

ATGGCTCCGA TTCGACTCTC AGACCAAGAG CATCTTCGAG CAAGAGAATA ACCATTCCAG 240
TTTCTACACA GGAGTGATCA TTCTGATTGG AGCCGGGGCC CTCATGATGC TGGTTGGTTT 300
CCTGGGGCTGC TGTGGAGCTG TACAAGAGTC CCAGTGATG CTGGGATTGT TCTTCGGGTT 360
CCTCTTGGTG ATATTGCGCA TTGAGATAGC CGCCGCCGTC TGGGGCTATA CCCACAAGAG 420
TCGAGTCGAG 430

```

(2) INFORMATION FOR SEQ ID NO:659:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

```

GAATTCGGCC TTCATGGCCT AAGAGTACAG AGATTTCACT TCATCTGTG CTAATGTTTA 60
ATTNAAAGTA TATTGACACT AGTAAAGACA CTTTATTTTA ATTTGAGGTA TAAATGTCTA 120
CCTAAAATAG ACTATTTCCTA TTGAGTCATA CATTTTAAAT GTGGTATATA TTCTTATATT 180
TCAGAAAATG ATAACATCA TAGAAATCTA ATACTCATT ATTGATTAA TAATTATTTT 240
TTTCTCAAAA TTGGAAATA TCTTTTCCTA TGTAATGGTC ATGTCTCGAG 290

```

(2) INFORMATION FOR SEQ ID NO:660:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

```

GAATTCGGCC TTCATGGCCT-AGTCAGAACT CTTTGTGTCC CTGTTTTTGT GTCCATTTCA 60
TGTACCTTGG CACTTTAAGG CTTGTCCTGC AAAATAAAAC ATGTCATCAT CACTTGTGAA 120
GGCAGAGCTT GGGAGTTTGC ACTGCTAAGA TGAGGATAGG AAAGAAATTT ATGCCGAGG 180
GCCTTTGATG CTGCCCCTC ACCTGTCTGC ACAGCCAGGG CACGGCCAGC GGGAGTGGAG 240
AAGACGAGCG AGACCAAAAC CTTGCCGTGG GGAGGAGGGT GGCATAGCCA TTGATAAATC 300
GGGACTTGAA CTATCCCATC ACTCTAAAAA TATTTTAT CTGATTACAA AAGTAATAGA 360
TGGCCAGGCA TGATGGCTCA TGCCTGTAAT CCAACACTC CTCGAG 406

```

(2) INFORMATION FOR SEQ ID NO:661:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 461 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

```

GAATTCGGCC TTCATGGCCT AGTGGAAGT AAAACTCAGA GGAGGCATCA AACCCAGGCT 60
TGGGGGACAA AACTAAGTCT TGCCAGAGTC CTGAAGGATG AACACAGTT AACCAAGCAA 120
GGGATACTGG AGGGCATGGA GGCTCTCTGG CCTGGAGTGC AGAGCATGGA GTGCTCAAAG 180

```

```

AGCTAGTTAG CTCTGCAAAG CTGAGTGTCA GGAATGTAAA GGGAGAGAAT AGGAGTGAGA      240
GAAGAGTCTG GCAAGGCAGA CAGGGAAGGC CTATATGCCT TGATGGAGAA CCACTGAAGG      300
ATTTAAAGAA GGAGAGGGTT AATTTTGTCC AATAGAAAGA TCACATTGTG TGTAGTGTGG      360
AGGATGGGTT GCAGAGAGAG AAGCTAGAGA CCAAAGATG AGACGGGAAC AGCTGCAAAAT      420
TTCGAGAGCT CGTAAGATTA TGTATGGCTG GACCACTCGA G                                461

```

(2) INFORMATION FOR SEQ ID NO:662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

```

GAATTCGGCC TTCATGGCCT AGCCTGAGCT CAGGAGTTCA AGACCAGCCT GGGCAACACA      60
GTGAACTCC ATCTCTACTA AAATACATAA AAATTAGCTG GGCCTGGAGG CATGCACCTG      120
TGGTCCCAGT GCTACTGGGG AGGCTGAGGC AGGAGAATTG CTTGGGCCCC GGAGGCAGAG      180
GTTGCAGTGA GCCAAGATCG CGCCACTGCA CTCCAGCCTG GGCAACAGAG CGAGACTCCA      240
TCTCAACAA ACAACAAAC AAACAAACAA ACAAAACAAC AGTTATTTTT TTCTCACCAT      300
TCTAAAGAA GTTACATTG ATCTTTTTTC AAAATTGGT CAGTTTGTAT AGTCTTATTT      360
CTCCATACTT TCATTCCTCC TTTTATTTTC TGTAATAAAT TGAACCTTAT ATTCCTTATA      420
TGATAATTTT AATATCCAAA GTCATTGGTC ATATTCTCCA GTTCATGATT TCTGCTGAGT      480
TTGTGGTGCT GATTTTCTCG AG                                502

```

(2) INFORMATION FOR SEQ ID NO:663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

```

GAATTCGGCC TTCATGGCCT ACAACCACCA ACATTTGTGT TTTTGCAGAT GAACAGGTTG      60
ACAGAACTCC CACTGGCTCA GGAGTGACAG CCCGAATTGC CTTACAGTAT CACAAAGGGC      120
TTCTGGAAGT GAACCAGATG AGAGCCTTCA AAAGCAGTGC AACTGGCTCA GTATTCACAG      180
GGAAAGCTGT GAGGGTAAGT GGCACCCTTA GCTTCTTATT TATAAATGTG TCACTCATGA      240
GACTGGAGAG GCCTGAGTTG GGTGTTTGAT AAATTTCTTC ACTCAGCTCT CAGAAGAGAA      300
TTTAAAGCA GGCCTGTAAA AACTTCTTTT CAACTAGGAC ATTGGTTATC CAGTGTGGTC      360
TTGGGGCCCC AGCGGGCCCC TAAGGTCCTT TCCATGGGTT CAGAGGGTCA AAAGTGTGTT      420
CATAATAATG ACATTATTTG CTTTTCCTC TCATTCTCTC AAGAGTGTAC AGTGGGTTAC      480
TCGAG                                485

```

(2) INFORMATION FOR SEQ ID NO:664:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

```

GAATTCGGCC TTCATGGCCT AAAAATTATA AAGTGTAATA TATCTTTGTA TCTCTAGTTT      60
TTCTCCTTTC CCCAGATAAG AATAAAAGCA GGCTGCAGGC TCCTGGGGTG ATAACCCACT      120
TGGGTCGAGT TCCATCGCTG TTGGCGATAA ATCTTGTTGG TGTTCACTTT TTGGGTTCTC      180
ACTACCTTTA TGAGCTATAA CACTCACCCCT GAAGGTCTGC AGCTTCACTC CTGAAGCCAG      240
CGAGAGTACG AACCCACAGG CAGGAGAGAA CTCTGAACAC ATCCGAACAT TGGAAAGAAC      300
AAACTCCAAA CAAGCCGCTT TTAAGAACTG TAACACTCAC AACTCGAG      348

```

(2) INFORMATION FOR SEQ ID NO:665:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

```

GAATTCGGCC TTCATGGCCT AGTCGTTATC AGAGGTGGAG ACATTTAGAA GTTGTTCCTTA      60
ATCAGAGTGA AGCTTGTGCT TCGGAAAGTC AACCTCACTC CTCAGCACTC ACAGCACCTA      120
GCTCTCCAGG TTCCTCATGG ATGAAGAAGG ACCAGCCCAC ATTTACCCTC CGACAAGTTG      180
GCATAATATG TGAGCGCCTC TTAAAAGACT ATGAAGATAA AATTCGGGAG GAGTATGAGC      240
AAATCCTCAA TACCAACTA GCAGAACAAT ATGAATCTTT TGTGAAATTC ACACATGATC      300
AGATTATGCG ACGGTATGGG ACAAGGCCAA CAAGCTATGT GTCATGAAGC TTTGTACAT      360
ATCTGGGTAC CAGGTTTGAC CTCAAGAGAT GGCTGCTGTA CACTTTTTGC AACTGGTTTG      420
ATGTCACATT TCAGCTCCAA CTTTGCATCC TGAGAACACT TAAACGTTTC TGCAGGTCCA      480
TTTTATACAA CTGAAAGAC CGTAAACTT TCTGGTTGCC ACAAGCATAT CTTTCTTTTC      540
TGCTCATCCA ATAAACAGCT GAGCCCTCGA G      571

```

(2) INFORMATION FOR SEQ ID NO:666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

```

GGGATCATT TATTTCAGCT ACTGAGAACT AGAATATTAA GAGACTGCTG GCAAGGCAAG      60
CAGTTAATTT TCAGTTGAAA TTGCATTAAA TAAAAAGTAT TTTCTTGCTT TGTGGAAGCA      120
CGTGAATTT TGTA AAAAGC TGCTTGTTTT CCCCATTTAC AGGTCTGTA CAGAGTAATG      180
AGATGTGTGA CGGCTGCAAA CCAGGTGTTT TTTTCTGAGG CTGTGTTGAC AGCTGCTAAT      240
GAGTGTGTTG GTGTTTGCT CGGCAGCTTG AATCCTAGCA TGA CTATACA TTGTGACATG      300
GTCATTACAT ATGGATTAGA CCAACTGGAG AATTGCCAGA CTTGTGGTAC CAATTATATC      360
ATCTCAGTCT TGAATTTACT CACGCTGGTA TGTGAATTAT TCTTTTCCTT TTAATGTGT      420
TGGTTTATTC AGGCCATCT CGAG      444

```

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

```

GGGAAGTGAC AAGCAATTAA CTGGAGAATA AGTGAGGGGA ATGCAGCAGT AGTATTCTTT      60
AACTTAATTT GCCATTAAAG AGAGCACTTG GAATCTGAAG AAAGTCTATC CCTACCAAGG      120
AAACGGAGTC AAATTGCAAT TAAGATTAACT TTTGGTTATA TGGAAGCAAG AATCATGCTT      180
CTCATCATCA ATTGCGTCTC TTTGGTAGCC AATAATTCCA TCTGTAATCA TGGCAGCAAC      240
TTAAGTATTG CCAATGTTTT CAAATGTGTT ACAGCATTAAG GGCATCCACA TCTAAAGAGG      300
CAGTTTTTAAA CAAGAGGAAA ACGGAAGTGA AATGTGCCAA GAAGTGAACA CGGACATGGC      360
CTCTCCTGGA ATACTGCCCC CCATGCCAGC AAGCTCTTCC TCCAGTCAAG AAGGCCTGTG      420
CCACGCTGCT TGGTTCCTG CTGCCTGAAG ATGCATTGTA GCCCTATGAG ATTAGTATGG      480
CTATTTCTGT CTGCTGACCA GGAGAGAAAT GAGTAGTTCT CGAG                        524

```

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 554 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

```

GAATTCGGCC AAAGAGGCCT ACACAGAGGG ATAATTGGCA TTGGTATCAA CTGACATATT      60
CACAACTTTG AATAAACTT TCCACATTG GAAAATCACC ATGCCTGGCC CCTAGGCTAT      120
ACTTTGAAAA CCACTGCTTT AGTGTTTATG AAATTGTTAC CCTCATACTA ATATTTACTA      180
CAACCCCCAC CTTGACAATA CATACAAAAG AGGAGTAACA GTTTCCATA ACCTTTCTAA      240
ATTGAGTCT TATTAAACCA GACTCATAGC CTTGTTGAC TTTTCTTCCT GATCTGTGCC      300
TTATCCCTAG GCGGGTGATC ATGCGGGTAT CTGCTAATTG GCAGATGTGA GTGGTTATAC      360
CTATTTACAA GCAACTCATT GCAAAAATAA TTTAGCTAA AGAAAACATC CATGGCCAGA      420
GAATAAGTTT TGGAATTTGA TATGTTAAAT GAGCTTTATG TTTACCTTTA AAAGGTTAAA      480
ATATTTACCA TTCATGGATT ACCTTTTTC AGAAAGTAAG AATATATAAA TTACATTTAA      540
TCTTGAAGCT CGAG                        554

```

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 329 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

```

GAATTCGGCC TTCATGGCCT AATCGTATTC CATCTACTGC ATACTTTTCA TAGATGTCCT      60
CCATCAGAAG CACCTATGGT TGTTTGTTAA ACGTGTTATT TCCTGATCCC ACCCCAGGAT      120
TTCTGAGTAT TCTAAGAATT TCTAAGTGTG AGGCCTGGAA ATATGCATTT TACAACCCCC      180
TAGAACATTC TTATGTGCAC TAAATTTTGA GAACCACTAA TCTGGTGTAT ATACTGTTGT      240
TACTTAATAT TTTCTTAATG ATAGATACTT GGATGATTTT TGACTTTTAT ATTATTATAA      300
GCAATGTTGT AAACATCACA CAGGCCAAG                        329

```

(2) INFORMATION FOR SEQ ID NO:670:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

```
GGCGTATGAT ACCTAAAGTG GAGTGGTCGG CGTTCCTGGA GCGGCCGAT AACTTGCCTC 60
TGATCCAGGT GCCGAAAGGG CCGGTTGAGG GATATGAGGA GAATGAGGAG TTTCTGAGGA 120
CCATGCACCA CCTGCTGCTG GAGGTGGAAG TGATAGAGGG CACCCTGCAG TGCCCGGAAT 180
CTGGACGTAT GTTCCCCATC AGCCGCGGGA TCCCCAACAT GCTGCTGAGT GAAGAGGAAA 240
CTGAGAGTTG ATTGCACCAG ACTCGAG 267
```

(2) INFORMATION FOR SEQ ID NO:671:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 429 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

```
GAATTCGGCC TTCATGGCCT ATTATCTCTC AAAAACAAAG CAATAAGTAC CAAGAAATAG 60
CAACAAAAAT TAGCTTGTAAG GGTGGTTTC TGAGGGTAGA AATGGCTCTT GATGCCATGT 120
GGAGCAATGG GAAGGAGGCT TTCTAGTTAC ACAGACTCTT GGTCTGCCA CTTATTCTT 180
TTATTTTATT TTATATTTTA CTTTAAATTT TTTGAGATAG GGTTTCACCC TGTCGCCCAG 240
GCTGGTGGGC AGTGGCTCAC TGCAGCCTCG AACTACCAGG CTGAAGTGAT GCTCTTACCT 300
CAGCCTTTTC AGTAGTTGGG ACAACAGGTG CACACCACCA TTCCTGGCTA ATTAAAAAAA 360
TTTTTTTGTG GGAACATGGC AAGACCTTGT CTCTATTAAC AACACAGCA ACAGCAACAA 420
CAACTCGAG 429
```

(2) INFORMATION FOR SEQ ID NO:672:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 357 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

```
GTAAAAATCGT TCTTGAGAGG AACGTCTCTG TGCGAAGAGA TAATGAGTTT AGCTCTGAGA 60
AGTGAGCTTG TAGTGGACAA AACAAAGAGG AAAAAAGAA GAGAACTGTC TGAGGAACAG 120
AAACAAGAAA TTAAAGATGC TTTTGAAC TAATGATACAG ACAAGATGA AGCAATAGAT 180
TATCATGAAT TAAAGGTGGC AATGAGAGCC TTGGGGTTTG ATGTAAAAAA AGCTGATGTA 240
CTGAAGATTG TTAAAGATTA TGACAGAGAA GCCACAGGGA AAATCACCTT TGAAGATTTT 300
AATGAAGTTG TGACAGACTG GATATTGAAA AGAGATCCCC ATGAAGAAAT ACTCGAG 357
```

(2) INFORMATION FOR SEQ ID NO:673:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

```
GGTAGATACT GGTTTTTCGT ATCCTGCTTC TCTTAAGGGC AGCTCTTTTT AGCATACTCC      60
CATGCAGCAA CAGAAATTG TATCTTTTTT TTCTTTTTTG AGATGGAGTC TCGCTCTATC      120
ACTAGGCTGG AGTGCACTGG CACAATCTCG GCTCACTGCA ACCTCTGCCT CCTGGTTCAA      180
GCGATTCTCC TGCCCTAGCC TCCTGAGTAC CTGGGACTAC AGGTGCGCGC CACCACACCC      240
AGCTAATTTT TATATTTTGA GTAGAGACGG GGTTTTACCA TGTGGCCTCG AG              292
```

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

```
GGATGGACAT CAGCACTTTA CGGCGCCAGC TGAGACCCAC AGGCCAGCTC CGTGGAGGGC      60
TCAAGGGGCTC CAAGAGTGAG GATTCGGAGC TGCCCCCGCA GACGGCCTCC GAGGCTCCCA      120
GTGAGGGGTC TAGGAGAAGC TCATCCGACC TCATCACCTT CCCAGCCACC ACTCCCCCAT      180
GTCCCACCAA GAAGGAATGG GAAGGGCCAG CCACCTCGTA CATGACATGC AGCGCCTACC      240
AGAAGGTCCA GGACTCGGAG ATCAGCTTCC CCGCGGGCGT GGAGGTGCAG GTGCTGGAGA      300
AGCAGGAGAG CGGGTGGTGG TATGTGAGGT TTGGGGAGCT GGAGGGCTGG GCCCCTTCCC      360
ACTATTGGT GCTGGATGAG AACGAGCAAC CTGACCCCTC TGGCAAAGAG CTGGACACAG      420
TGCCCCCAA GGCAGGCAG AACGAAGGCA AGTCAGACAT CCAACTCGAG              470
```

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 637 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

```
GAATTCGGCC AAAGAGGCCT AGTCGCTCTT GCTGAAACCT TCAATGCAGT GAGCGCCCAT      60
CTCATTGGGA CCTACAGGCT GAAGTTCTTC CTCTGATGGA CATGACCCCC GTGTTGTCTC      120
TAATAACCTC ACTTTCACCTC TGTTCCAGCC ACACGGGGTT TCTGTCTTTC TCGGGTCATG      180
TCGGGCTTAT GTGCCTCGGG CCCTTTGCTC ATGCTGTTCT CTGCCTGGGA TCGCCTTTAC      240
TGGGTGCCAG GATGGTCAGT GATTCCATT CTCTCAGAGT CTATTCACAG GTCCCCTTCT      300
CGGTCACGCC TTCTCTGGCT CCACTGTCTA AAATTTC AAC AGCTGCCTCT GCGCCCCGAA      360
CTTCATATCC CCCTTATCTG CCTTTTTTCC TTCAGCTCTT ACTTCCATCA AATACAGTAT      420
GTATTTTAA AAGTCTTATC TTGTTACGG TCATTTTCTT CCACAGGTAA TTTTGGTAAA      480
CTTTGTAAGA TTGATGATGT TTAATACTGT TTTGTTTAA ACAGTACCCC CAGTTTAGCA      540
CACAGCTTTT GAATGAATGA CCAGTTTTTA TTCCCCTCTG AAGCGCTAAG AGCTGCCGCT      600
GAGGTGGCAT CTGTAGCNGC TCCCGCTCCA ACTCGAG              637
```

(2) INFORMATION FOR SEQ ID NO:676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

```

GAACACGTCA TGAGGAAGGA GCAGCGCAAG GAGGAGAAGG AGAAGCGGCG CCTCGACCAG      60
CTGGAACGTA AGAAGGAGAC GCAGCGCCTA CTGGAGGAGG AGGACTCCAA GCTCAAGGGC      120
GGCAAGGCGC CGCGGGTGGC CACGTCCAGC AAGGTCACCC GGGCCCAGAT CGAGGACACG      180
CTGCGCCGAG ACCATCAGCT CAGGGAGGCC CCGACACAG CCGAGAAAGC CAAGAGCCAT      240
CTGGAGGTGC CGCTGGAGGA GAACGTGAAC CGCCGCGTGC TGGAGGAGGG CAGCGTGGAG      300
GCGCGCACCA TCGAGGACGC CATTGCACTG CTCAGCGTGG CCGAGGAGGC GGCCGACCGG      360
CACCCAGAAA GACGCATGCG GGCAGCCTTC ACAGCCTTTG AGGAAGCCCA GCTGCCGCGG      420
CTCAAACAAG AGAACCCTAA CATGCGGCTG TCGCAGCTGA AACAGCTGCT CAAGAAGGAG      480
TGGCTCCGCT CTCCTGACAA CCCCAAACTC GAG                                     513

```

(2) INFORMATION FOR SEQ ID NO:677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

```

GTCCATCCTG AGCTCCATGG AGAAGCCACC CAGCCTCGGT GACCAGGAGA CTCGGCGCAA      60
GGCCCGAGAA CAGGCCGCCG GCCTGAAGAA ACTACAAGAG CAAGAGAAAC AACAGAAAGT      120
GGAGTTTCGT AAAAGGATGG AGAAGGAGGT GTCAGATTTC ATTCAGACA GTGGGCAGAT      180
CAAGAAAAAG TTTCAGCCAA TGAACAAGAT CGAGAGGAGC ATACTACATG ATGTGGTGGG      240
AGTGGCTGGC CTGACATCCT TCTCCTTTGG GGAAGATGAT GACTGTCGCT ATGTCATGAT      300
CTTCAAAAAG GAGTTTGCAC CCTCAGATGA AGAGCTAGAC TCTTACCGTC GTGGAGAGGA      360
ATGGGCCCCC CTCGAG                                     376

```

(2) INFORMATION FOR SEQ ID NO:678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

```

GAATTCGGCC TTCATGCCTA GCAGGAGGTT TTATTGTAA GAGGCCGATT GTACAGAGCA      60
AAGATTGTTC TGACACGGGG GGCTGGGTGG TGGGACCCAG AGGCCAGAGC TGGGTGAAGG      120
ATGAGGGGTG GCATCGCCCC ATCCAGGCAG TGGGCAGGGC AGGGAGGACT AAACGGCTGC      180
CTCCAGTTT CCTTCCCTGC CCCTCATTAC TGGGTAAGAG GGAGCCAGGC TATTTCCACG      240
GATCCAGGAG AATATAGCAG GAGACCCTCA CCACCCACA CCATGCCCA AGGATACGGG      300

```

AGGTGCCCCA GTCTGGCTTT TGCAGTCGGC CAGCTCCCAG CCTCCTCGAG

350

(2) INFORMATION FOR SEQ ID NO:679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

GAATTCGGCC	TTCATGGCCT	AGTTCTCACC	GGGGAAAAAC	CCACTGTTAG	GATGGCATGA	60
ACATTTTCCT	AGATCGTGGT	CAGCTCCGAG	GAATGTGGCG	TCCAGGCTCT	TTGAGAGCCA	120
TGGGCTGCAC	CCGGCCGTAG	GCTAGTGTA	CTCGCATCCC	ATTGCAGTGC	CGTTTCTTGA	180
CTGTGTTGCT	GTCTCTTA	TTAACCGTGC	TGAGGCTCCA	CATAGCTCCT	GGACCTGTGT	240
CTAGTACATA	CTGAAGCGAT	GGTCAGAGTG	TGTAGAGTGA	AGTTGCTGTG	CCCACATTGT	300
TTGAACTCGC	GTACCCCGTA	GATACATTGT	GCAACGTTCT	TCTGTTATT	CCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:680:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

GGGGGTGGAA	GGCGTAGTGC	TTGAAATGCA	GGGATCTGGC	AGTCAGCAGA	AGGATCTGAG	60
ACCCAGTGTC	GAGGTTAAAA	AAAAAACAAA	AAACCAAAAA	CCAATGCAGG	AATCCAGTGG	120
GTGGAGTGAG	GGGATCTGGG	ATCCAGTGAT	GGGGGCCCCA	GGATCCAGGC	ATTGTGGTTG	180
TCAGGATCCA	GTGGTGAGGT	TTGTTGACAT	CCAGAATCCA	GCAGCTGAGC	TTGGAGATCC	240
AGGGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:681:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

GGATTCCTAC	AAAAATTGAG	GCAGAAGATC	AAAATCGGAG	TGGTAGGCGG	ATCGGACTTT	60
GAGAAAGTGC	AGGAGCAACT	GGGAAATGAT	GAATATTCAA	AGTCATCTGG	GTGAGGCCCT	120
AATCCAAGAT	TTAATCAACT	ACTGTCTGAG	CTACATTGCG	AAAATTAAAC	TCCCGAAGAA	180
GAGGGGTACT	TTCAATTGAAT	TCCGAAATGG	GATGTTAAAC	GTGTCCCCTA	TTGGAAGAAG	240
CTGCAGCCAA	GAAGAACGCA	TTGAGTTCTA	CGAACTCGAT	AAAAAAGAAA	ATATAAGACA	300
AAAGTTTGTA	GCAGATCTAC	GGAAAGAGTT	TGCTGGAAAA	GGCCTCACGT	TTTCCATAGG	360
AGGCCAGATC	AGCTTTGATG	TCTTTCCTGA	TGGATGGAAA	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

```

GAATTCGGCC TTCATGGCCT ACCCTTCTAG GTGTCATCTC CTTCCTCCC TTTCCCCCAA      60
GACTCCCTCT GGGCCCAGCC AGCAGGTGAA GCCTGACTTA GGAAGGGGG GATTTCAGG      120
GGAGGGGCCC TGGCCCCCAC TGACCCAGCA TTGCTATCCA CAGGAGGAGC AGCCCCACA      180
ACATCGATCC AAGAGGGGGG GCTCAGTGGG CGGCGTGTGC TACCTGTGCA TGGGCATGGT      240
CGTGTGCTC ATGGGCCTCG TGTTGCCTC TGTCTACATC TACAGATACT TCTTCCTTGC      300
GCAGCTGTCC CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGGCCTCCC AAAGTGCTGG      60
GATTACAGGT GTGAGCTAGC ACTCCCAGCC GACAGGTGCT TCTTAAATGT TTTCTTTGAG      120
CAGGAATTGG TCCAGGAATT GGTTCCTCAAG TTAGAAGGAA AATTGAGGG GAAGAACTTG      180
TTTTTCTCC AATCAGTCTC TGATTAAATA GTTATTAGGA AAACTCCTT GCTTATGTCT      240
TTGTATTGCA CATTTTATA TATGTATATA TGTGTAAATA GAGATATTTA TATATTACA      300
GACAAACACG TGTATGCACA TTTACAATG GAGGAAGAAG GGATATGGTG TGCCTGAGG      360
TAAAGTGAGC AGGATACAG AAGAGAACT CGAG                                     394

```

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```

GTCCTAACCT TGGGTCCAAG TTTCGTTATA GTGGCAGGAC ACAAGCGCAA ACGAGAAGAG      60
CCAGTGCGTT GATAGATCGC CCAGCACCTT ACTTTGAACG CTCATCCAGC AAACGTTATA      120
CCATGTCTCG CAGCTTGGAT GGAGCATCAG TGAATGAAAA CCATGAAATA TACATGAAGG      180
ATTCTATGTC TGCTGCAGAG GTTGGTACTG GCCAGTACGC CACAACAAAA GGCATCTCTC      240
AGACCAACTT GATCACCCTT GTGACTCCGG AGAAGAAGGC TGAGGAGGAG CGGGACGAGG      300
AAGAGGACAA ACGGAGGAAG GGGGAAGAAG TCACGCCCAT CTCGGCCATC CGGCACGAGG      360
GAAAGACTGA CAGTGAGCGC ACGGACACCG CAGCCGACGG GGAGACCACC GCCACTGAGT      420
CGGACCAGGA GGAAGATGCA GAGCTCAAGG CACAGGAGCT AGAAAAAAT CAAGATGACC      480

```

TGATGAAACA TCAAACCAAC ATTCTCGAG

509

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GAATTCGGCC TTCATGGCCT ACCAAAGTGC TAGGATTACA GCGGTGAGCC ACTGCGCCTG      60
GCCTCTTTCT TCTTTCTTGA ATTCTCTTCT TTTTATGTTT CTGGGAAAAT CCTACTCATT      120
TTATATGATT TGGCTGATGT AAAGCCACCA TTGTCTTCCT AAGCAGAGAG GGTCTTGCTT      180
TTGGGTGCTG CACAACCTTG TGCAATTTT CTGTTACATC ATTTATCTTT TGGGGATTGT      240
TTATTTTCAT ACTTATCTCT CTTCCAGGAC CATGTTAGGG AGAGGTGTTT TTAATTTTAA      300
CCTTTTCTGC AGCACTTAGC ACAGTGCCTA ATCATAGTAA ATATCACGTA AAAGTTGAAT      360
GAAGGAATGG ATGTTTGATA TAGAGTTAGG ACACCTGTGT CCAGGTCTTG CTTTGCTTTT      420
CCTTNACCC CCCACCTCGA G                                     441

```

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GAATTCGGCC TTCATGGCCT AGTTGGTTTA TGTTATGTAA AGTTATGTAG TTATGTAAAG      60
GTGCTGAAAT GTCACCTCTG TGATTATGTT TTATTATATA AGGCTCTATC TTAGCAAACC      120
AGGAGAGAAA TTCTCCTGAT GGCCTTGAAG AAGCAAACAG CCACCTGGTT AAGCCCTGT      180
GGATAGTGCC AAGTGGCAGG AAAGTGGGAG CCACCTCTAG GACCTGAGGA TTAAAGTCAG      240
TAAGAGCTGG GACCTCACTC ATGCAGACTC GAG                                     273

```

(2) INFORMATION FOR SEQ ID NO:687:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC AAAGAGGCCT AGGGCTCTGG ATTTTGAGTT TCGGGCTCTA GATGGAATTG      60
AGAAGGTCCA ACTTGCTCAG AGGGCCCTGG AGGCTCATCT GACTTCACCC GGATTTTCCT      120
CGAG                                     124

```

(2) INFORMATION FOR SEQ ID NO:688:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC AAAGAGGCCT ATGCCATCTT AGTCCCTCTT CCCAACCCCA TTTTITAGTT      60
ACTTTCCTTT CATTAAAATA TCCTTATGCA CTTACAAATA AACTAAGTC CCAAGAGGGC      120
AACAAAATAT AAGATTCTTA ATGATACAAA AACAAATCTT TCTGATACTA GATCTTTTAT      180
ACTAGAAAAA TAAATTCTTG TGCTTGAACA TCATTTTAA GCACTTAGTG AATTGAGAAT      240
CTGAACTGCC ACTTGAAATA TTCCCGGGAA AGAAACATTA TGAACCAAAT GAAGGAACAT      300
AGCTATTCAA AGGGACATAT TTTTGTACTT GTTTTGCTCC AATTTCTGCT ACATAGACTG      360
CTCCAGTCTT TCTGTCGACT CTAGGAGATG CCTAAACCGT CGATTGAATT CTAGACCTGC      420
CTCGAG                                         426

```

(2) INFORMATION FOR SEQ ID NO:689:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCGGCC AAAGAGGCCT ATAGTTTTTT CATGTTACAT CTTTtagatt ATTTTCTTTT      60
TAATCTATCT GTGACTATAT TTAAAGTCAA TTCTTGTTTT TTCCTTTTCC TTTTGTGGG      120
TAACGGGGTC TCGCTGTGTT GCCCAGGCAG ATCTCAAACCT CCTGGGCTCA AGCTGTCTCTC      180
CCACCTCTGC CACCTAGGC TCGAG                                         205

```

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```

GAATTCGGCC AAAGAGGCCT ACGTTGATTG AGCACTGAGC CCTTACTACG TGCTAGGCAT      60
GGTACATGCA TGGCCTTATT TAATCCTATC AACCTCGAG                                         100

```

(2) INFORMATION FOR SEQ ID NO:691:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```

GAATTCGGCC AAAGAGGCCT ACATCATACA AGTCGTCGTA AAGCAAATCT GAGCTGTTGT      60
CATTGGAAGG CACTTTAGTT TTGATGCAGT ATTCGCCAGG GGTGTGGGG ACCTTCACTC      120
CATCCTTTTC TGCTTCGGCC TTAGTGGCTG AAACCTGTTT CCTAATAATT TCAGCATATT      180
CTTTGTCTTT TCCTTTACTG TCTCTCCATT TCCTGAACAT AACTGAAGCA TCGACATTGG      240
CTGGGGAGAA GGTGTTGGGC TCATTAAGCA GTGAGATTAC ACTTAATAGG ATAGTCCTCG      300
AG                                                    302

```

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 662 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```

GAATTCGGCC AAAGAGGCCT ACCAAATACC AGGCTACCAT GGTCTACAAG ACTCTCTTCG      60
CTCTTTGCAT CTTAACTGCA GGATGGAGGG TACAGAGTCT GCCTACATCA GTCCTTTTGT      120
CTGTTTCTCT TCCGACAAAC ATTGTACCAC CGACCACCAT CTGGACTAGC TCTCCACAAA      180
ACACTGATGC AGACACTGCC TCCCCTCCA ACGGCACTCA CAACAACCTCG GTGCTCCCAG      240
TTACAGCATC AGCCCCAACA TCTCTGCTTC CTAAGAACAT TTCCATAGAG TCCAGAGAAG      300
AGGAGATCAC CAGCCCAGGT TCGAATTGGG AAGGCACAAA CACAGACCCC TCACCTTCTG      360
GGTTCTCGTC AACAAGCGGT GGAGTCCACT TAACAACCAC GTTGGAGGAA CACAGCTCGG      420
GCACTCCTGA AGCAGGCGTG GCAGCTACAC TGTGCGAGTC CGCTGCTGAG CCTCCCACAC      480
TCATCTCCCC TCAAGCTCCA GCCTCATCAC CCTCATCCCT ATCAACCTCA CCACCTGAGG      540
TCTTTTCTGC CTCCGTTACT ACCAACCATA GCTCCACTGT GACCAGCACC CAACCCACTG      600
GAGCTCCAAC TGCACCAGAG TCCCCGACAG AGGAGTCCAG CTCTGACCAC ACGACCCCTCG      660
AG                                                    662

```

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```

GAATTCGGCC AAAGAGGCCT AAGCCCCCAA AACACGCTCT TTTGTGCCTC CCCTCAAATC      60
CTTCACAGTG TTCTTCCATA TCCACTCCTT CCAGGAAGCA TGTTCTCACT ACCCCAGTTC      120
ATGTGGGTTT CTTCCTCTC AGAATTTCTA TCATGCCCCC ATAAGTTTAG CAAATTGTCC      180
TTCTCTAATT GTTTCACATC TGTCCATCCG ATATCCCAGG AGGACTGTCA GCTCTATGAA      240
GGCAGGGGTT GTCTTTCCTT TACCATGCCT ACCATGCCTT ATAGTGTTAA TAAATTAACC      300
TACCCAGAAA TGTTTCTCGA G                                                    321

```

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

GCGATTGAAT	TCTAGACCTG	CCTCAATCCC	CTCCCTACTT	GCTTTTCTT	AGCATATAAA	60
AGTCCACAAG	TTTTACTCAT	CTTTTAAAA	AACGAAAACA	TCCTTAGACC	GTGTCCTCCA	120
TTAGTTGCTA	TCCTGCCTTC	TTCTCTCAGC	TGAGCTGTCT	GAAACATGCT	AACATGCTTA	180
TACAATACTT	GCTGTCCTGC	CTTCTGCTCT	CAGCTGAGCT	CTCTGAAACA	TGCTAACATG	240
CTTATACAAT	ACTTGCTGTC	CTGCCTTCTC	CTCTCAGCTG	AGCTCTCTGG	AACATGCTTT	300
TTATACAATA	CTTGCTGTCC	TGCCTTCTTC	TCTCAGCTGA	GCTCTCTGGA	ACTCGAG	357

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 225 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

GAATTCGGCC	AAAGAGGCCT	ATGGGTTTTT	AAAAATTTTG	TTTTTATTTT	TTCTTTTGAT	60
GTGCAGAGGC	TGTTTACTTT	GATGCAGTCT	CACCTGTTTA	TATTTATTTT	TGTTGCTGGC	120
CTAGGCCTCT	TTGGCCGAAT	TCGGCCAAAG	AGGCCTAGTC	GGGTGTGGCA	GTGCCATTCT	180
GCGATCCCAG	CCACCGGGAA	GACCGAAGCG	GGAGGATCAC	TCGAG		225

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 314 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

GAATTCGGCC	AAAGAGGCCT	ATCCGCTTCT	GTTGCAGCTG	GCGGTGCTCG	GCGCGGCGCT	60
GGCGGCCGCA	GCCCTCGTAC	TGATTTCAT	CGTTGCATTT	ACAACTGCTA	CAAAAATGCC	120
AGCACTCCAT	CGACATGAAG	AAGAGAAATT	CTTCTTAAAT	GCCAAAGGCC	AGAAAGAAAC	180
TTTACCCAGC	ATGGGACTCA	CCTACCAAAC	AACTTTCTGT	CGTTGTGCCT	TCAAACAATG	240
AAGAAAAACG	GTTGCCTGTG	ATGATGGATG	AAGCTCTGAG	CTATGTAGAG	AAGAGACAGA	300
AACGAGACCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 353 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

GAATTCGGCC	TTCATGGCCT	ACAGAGTGTG	GACGGCCAC	TGGGTTGGTG	GTGGTGGTG	60
CCCGTCACAG	GGCTGGAGGT	GTGGCCGGCC	CACTGGGTG	TGCTTCTGC	CGTACGTCCC	120
TTCCCATGAG	GATGAGATGA	CCCATCTGTT	GCATCCCGGC	TGCTGATAAA	ACAAGACCCT	180
CGGAGCCAAG	AAACAACACT	GAGTTCCAGA	TTTCGGAAGG	TTCACGAGTG	TTGCCGACAC	240
GCCCTCCCAA	CTGCAGACAT	CCTCCCTGGA	GGACCTGCTG	TGCTCACATG	CCCCCTGTG	300
CAGCGAGGAC	GACACCTCCC	CGGGCTGTGC	AGCCCCCTCC	CAGGCCCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

GAATTCGGCC	TTCATGGCCT	AGATTGACAG	AGGTCAGTTG	TCACTTCTTG	CCTCTCTCCC	60
CTTCCAGCAA	CATGTATAAT	CCTGTGAGTG	TTCTTTCAGC	ACCCTTCTCT	GTTGTTTACA	120
CTACTGCAAG	AGCCTCCCTA	AGTGGTCTGC	CTGTTTCCAC	CCTGTTGTCT	TGGAATTTAG	180
TTTTCTCGCA	AAAGCCAGAG	AATGTTTCA	GAAGGTAGCT	CTTGAGCAAC	TTCCCACTTT	240
CTTGAGGGG	AGATCCAGCT	TCCCCAACAA	GACCAGCAGG	CCCCTGTGCG	GCCTGGCTCC	300
TGTTCAACCCT	ACCAGTCTTG	GCTCAGGCTC	ACGGCTGGAA	TATGCCGAGC	TCTTCTTGT	360
CCTGGGGCCT	TTGCACTTGG	CTTCCCTCTG	TCCAAAATCA	TCTTCCTGTA	GCTTTGTGCT	420
TGCCTAGCTC	ATCATCATAG	CAGCTCGAG				449

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

GAATTCGGCC	TTCATGGCCT	ACAGAGAACT	GAGGAAAACC	AACTACGTGG	AGAATCTCAA	60
AGAAAAAGC	GAGGGAGAAG	CTTCACTGTA	TGAAGATAGA	ATAATAACAA	GAGAGAAGGA	120
CATGAGGAGA	GTGAGAGATG	AGCCCGAGAA	GGTGGTGAAG	CAGTGGGACC	ATAGTGAGGA	180
TGAGAAAGAG	ACAGATGAGG	ACGATGAGGC	TTTTGGGGAA	GCTCTGCAGA	GCCCAGCAAG	240
CGGAAAGCAG	AGTGTGGAAG	CAGGAAAAGC	CAGAAGCGAT	TTGGGAGCAG	TTGCCAAGGG	300
CCTGTCAGGA	GAATTAGGCA	CAAGATCAAG	AGGGCTCGAG			340

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

```

GAATTCGGCC TTCATGGCCT AAGCCAAGCA AGGCTGTACC TTTAATTACT GCTGCCCTCA      60
TTTGCATCTG GCTGCCCTCA TTATAGTGCT ATTAGCAGAG TGCAGGGGTC CTCCTGCTGG      120
CCCATCGGGA GTGGTGCGTG CACAGTTGTG GGGCCTTGCT TTGGTGGTCT TTGCTGCCTT      180
CTGGGCAGAAA TGAAGGATTT GGAGTAGACA GCAAGCAGGC ATACATCCTG GGCCAGAAGC      240
AGCCTGCGGA GCTCATCGTG GCTTGCCTTA AATTGTTTCT CAACAATAAA GTTGTGAAA      300
AACAAATTGT GTTTCTTTC TCCTTATTAA AAACCAAAA TTATATTCAT TATAGAAAAT      360
TAAAGAAGAT AGCTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCAGCCTCCC AAAGTGCTGG      60
GATTATAGGC GTGAGCCACC GCGCCAGCC GAAAATCTAA AGATATTGAA AAGATACAAA      120
GGAGCACATT ATGAACATTT TTTCGTATC ACTGAGTATT TTATAACTGC ATCATTGATT      180
TTAAAAGAAAT TCATGACTTT GAAAACTAAT ATTCTACAAA GTAGCTTTTG ATTTAACATG      240
AGATTTTATA TATGTGCTTA TCTTGGTTCT CTATGAAACC CCATTGAAAT AAGAAAATGT      300
AAACACCAGC CAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

```

GAATTCGGCC AAAGAGGCCT AATAGTCAAG ACCTTTGCAG TTTTGATCAC AGAAATATGA      60
AAGATTACAC AGCTACAGCT ATATGAATGA TAAAAGTGAC AGCTATGGAT TTTTAAAGTT      120
ATAAGTTGCT ATACTACATA TATGTAATGT GTGTGTGTAT AGTGTGTAGG TATATATATT      180
TATATTTATA CACACACTAT ACATGTATTT TAAATATTG AAAATCCAGA ATTATTTTAT      240
GGTAAAAATT ACTAAAATTG ACTTCACATG CTGAATGAAG AGAGCCTGAG TAGACCAACA      300
AACAAATGAA AAATTAAGAC GGTTAGAAGA TACGCTTTCT AAAAGAATAC ATTTAGAATC      360
TAACTTTAAA AAAAAAAAAAT CCTACTCTCC TGAGCCAGAG TGGTCTCAGA GAGACTCCGA      420
GAACCTAATT TTTTACAAGT AAAATCTTTG AAGAATTGGT AATTGCTAAA TTTTCCAAC      480
ATACTATTCT ACAAGACTAA CCTAAACTG ATTATAAGAA CTAGGTGAGG AGGGCCGGCA      540
AAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 758 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

GAATTCGGCC	AAAGAGGCCT	ATCGAGCCAC	TGCACCTGGC	CGATGTGTTT	TGTTTGAAAT	60
CTTACTCAA	AGTATTTGAA	GAGTTGTGTA	TAGTTGTATG	GATATGTCTG	TAGTAAACAG	120
AAACAAATTG	CTTCAGTTTC	TCTTTACTTA	TTTTCTAGGT	TACAGTACCT	TTACCAGCAT	180
CCCAGCTTTC	CTTGCCTAAT	TTGGATCTA	CAGGGCAACC	TCTAATTGCT	TTGCCTCAGA	240
CTCTTCAGCC	CCCATTACAG	CATACCACTC	CCCAAGCACA	GGCTCAGAGT	CTGAGTCGTC	300
CTGCACAAGT	AAGCCAGCCT	TTCAGAGGAT	TAATTCCTGC	TGGAACACAG	CATAGCATGA	360
TTGCAACCAC	CGGAAAAGTA	AGTAAAGAGA	CATTTGCACA	GGTTATTTGA	GAATTTAAGG	420
TAGTGTGTTT	AGATATATGC	ATCTGTGTTA	TCTAAAAAAC	TAAATGCGT	CAGTTTTTAC	480
CACCTTGCAA	AAATCTCAAA	CCCCAGTATA	TTTACATTTT	ATCTATTTAC	TTTTAATGTG	540
TTTGGCCCCA	TCTAGTTTTT	ACCTAATAAC	AAAGAATTCA	CAAATTTATT	GGAAGAATTG	600
GATTTATAGT	GTCTCTTCTG	CTTATTTAAT	TATAAGTCTG	TTTGGTCAGG	TAATTCATA	660
ATACTTGAAG	CCTAACTATA	GGAGTTTTGT	ACTAAGGTTT	TTTGCCTTTT	CCTAGATTAC	720
GTCTTCACGT	ATAGGACATG	TAAACACAGC	AATTCGAG			758

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 663 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

GAATTCGGCC	AAAGAGGCCT	AAGATGGCCT	TCCCATGTTA	TGGCTACATG	GCTGTGATAA	60
CAAGTAGAGT	TATGTGTCTG	CGCTCTAAAC	TCACTGAGTC	TTGCAGGATG	TAAACATCCT	120
AGCTCAGCCT	ATCCTTGACC	AAAGCACANT	CATGCTCCTT	ACAAACTCCA	ACCAGCCTGC	180
ACACTGGGAG	GAGCGCGTGC	TGGGCTAGAG	CCACAGAATT	TTGTACCGTT	GGCAGCAGGG	240
AGGAGCCTGG	CCCCTCCTTT	CCTAGGTAGA	ATCTGGAATT	CAATCTGTGA	GGTGGAAGC	300
ATATACTAGG	AGGACTTTCA	CTCTGCTGAG	TCCCTGTTCC	CCCTCCCTTT	TTTTTCCTTT	360
TTGCCCAATA	AACCCCTTTA	TTCTCACACT	TCAAATTGTC	TGTGAGACTA	ATCTTTTGTG	420
GCCATGTGAC	ATGGACCCTG	TCTGTAGCTG	AAACTAAGAA	AAAGCCCTC	CCGCACAGTC	480
TGATGTTTCC	TCAGTCAGAC	ACTGCAAGCT	GTGATGTTGG	GGTGAGTACA	GGATATTTGG	540
CAATATTTGC	AGACAGTTTT	GGCTGTCAGA	GAGGAAGATG	CTGTATGCAG	ACACACTTGA	600
CAGCAATAAC	TTAAGCCAC	CCTGAGACTG	ACTCTGCATG	GTGATGCACC	TGAAGGCCTC	660
GAG						663

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 334 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

GAATTCGGCC	TTTATGGCCT	AGAGCGATGT	CAAGTGATCT	GCCCGCCTCA	GCTCCCCAAA	60
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GTGGTGGAAT	TACAGGCGTA	AGCCACTGCG	CCTGGCCCCA	AGTGTCATT	TTTTAATTTA	120
GTAATTCTAA	CCTAGGTATT	TTTCCTGCAG	TACAAAATGA	GGATAAAGCT	TTACATGAAA	180
ACATGTTGTT	CCTATTATGT	TTATTGCAGC	AAAAACACAA	CCTAAAAACC	CAATCTGAGC	240
AGGTTTTAAC	TAAATACTAA	TAATTCTGAC	ACTAGAACGT	TATGTAGCTA	ACAAAAATAT	300
GTCGTAAAAA	TAATCATGTA	GAAACTGGCT	CGAG			334

(2) INFORMATION FOR SEQ ID NO:706:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 369 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

GAATTCGGCC	TTCATGGCCT	ACCGAGCTTC	AGAGCATCAG	CAGTGTTCCT	CCTTCACTGT	60
GACGCTTGTC	CTCACTTCCC	AGGTGAGGAG	TCTAAGAAAA	CAGCCTTTCC	ATCAGCCCCT	120
GTCGTGACAG	ACCCTCCAGT	GGGATGGTAG	TGGCTGCCTC	ACCCATTTAC	AGGGCAACCC	180
AGTTTTGCTC	CTTCTGCCTT	GAAATTTGTT	CCTCCCAGAA	ACTGTCCCTC	ACAAGGCATG	240
AACAATCAAT	AGAAGATATA	CGTGGTCTTC	CCAGCACTAC	AGCTGCAGAA	TGAGCTGTGG	300
AGTGCCCCGT	CCGGAGTCCT	GAACAGCTTC	AAACTTTTCC	CCTTTAGAAA	TGCCTAACAC	360
GCCCTCGAG						369

(2) INFORMATION FOR SEQ ID NO:707:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 365 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

GAATTCGGCC	TTCATGGCCT	AGGCATCCTT	GGTGGCGCAT	CCTTGGTGCA	TTATATCAGG	60
AGGCAAATGA	TGTGGGTTTG	TCCCATTTGT	TGTAATGGTA	ACATTGGTTG	CTTGGTTAAG	120
GTGAAGGGTG	CCAAGCTTCT	CCACTGTAAA	GTTCTATTT	TTTTCTCTGT	AATTAATAAG	180
TAATTTGTAT	GATACTTTGA	GATAACAAAG	TAGACTGTTC	ATCAAACCTT	CATCAATGAA	240
TTAACATCC	AAAGACGCCT	CAAGAATGAT	CATCAAAAGC	AGCCTACTAA	TGACTGTGAT	300
TTACCATTTA	ATACATTTC	AACAGTGCAC	GTGCTCTGTG	ACATATTCTG	GGAAGGAATC	360
TCGAG						365

(2) INFORMATION FOR SEQ ID NO:708:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 436 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

GAATTCGGCC	TTCATGGCCT	ACACAAAGCT	TCTGGAGGAC	AAACGGGAGC	AGTTGAAGAA	60
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GAGCAAAGAG	CATGAGAAGC	TGATGGAGGG	AGAACTTGAA	GCTTTGCGGC	AGGAATTTAA	120
AAAGAAAGAC	AAGACGTTGA	AAGAGAATTC	CAGAAAGTTG	GAGGAAGAAA	ATGAGAATCT	180
CCGAGCAGAG	CTACAGTGT	GTTCTACACA	ACTGGAATCC	TCTCTCAACA	AATACAACAC	240
CAGCCAGCAA	GTCATCCAAG	ACTTGAATAA	AGAGATAGCC	CTTCAGAAGG	AGTCCTTAAT	300
GAGCCTGCAG	GCCCAGCTGG	ACAAAGCTCT	GCAGAAGGAG	AAGCACTATC	TCCAGACTAC	360
CATCACCAAA	GAAGCCTATG	ATGCATTATC	CCGGAAGTCA	GCCGCCTGCC	AGGATGACCT	420
GACACAAGCC	CTCGAG					436

(2) INFORMATION FOR SEQ ID NO:709:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

GCTGCTCAT	ATCTTAGAGA	AAATAAAGA	ACCACATGTT	GCTTCCCTGC	CTGCAAGCTC	60
TTCTGAATTC	ATCACCATTTC	ATGTTCTTTC	CTTCAGGGGA	AATGAAGGCA	GATTGTTCTG	120
TTGGTGCTCA	CAGATCTCTT	TCTGTTCTGA	TACCCTCCTC	TTCTCTCCT	GCTTCTTTCC	180
CTTCATCATG	TGCTCCTATA	CAAGTCTCTC	CCAACCTTAA	AACAAAAACA	AACCTTTCCC	240
TAAATCTTGT	GTTTGTTCCT	GCCATTAGAC	TGTATCGTCC	TTGCCATCCA	CGTTATTGGA	300
AGAAGGCCAG	CTCACCTCTA	CTCCCTTTCT	GCCCTTTCCC	TCTTAATCTG	CTGTCCTCTG	360
ATTTCTGCCC	CCACAACTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:710:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

GAATTCGGCC	TTTATGGCCT	AGGGGCCTGA	AGATCTTCGG	GTATTTGGCT	CCCAGAATCT	60
GACCACAGTG	AAGCTAAAAG	GGGTGGGTGA	CAGCTTCAAG	AAGTATCCTG	ACTACGAGTC	120
CAAGGGCATC	AAGGCTCACT	TCAACCTGGA	TGAGAGTGCC	GTGCTCAGTC	TAGACAGGGT	180
GGAGTCTGTA	TTTGAGACAC	TGGTAGAGGA	CAGCGCAGAA	GAGGAATCTA	CTCTACCAA	240
ACTTGGCAAC	ACCATTTCCA	GCCTGTTTGG	AGGCGGTACC	ACACCAGATG	CCAAGGAGAA	300
TGGTACTGAT	ACTGTCCAGG	AGGAAGAGGA	GAGCCCTGCA	GAGGGGAGCA	AGGACGAGCC	360
TGGGGAGCAG	GTGGAGCTCA	AGGAGGAAGC	TGAGGCCCCA	GTGGAGGATG	GCTCTCAGCC	420
CCCACCCCT	GAACCTAAGG	GAGATGCAAC	CCCTGAGGGA	GAAAAGGCCA	CAGAAAAAGA	480
AAATGGGGAA	CTCGAG					496

(2) INFORMATION FOR SEQ ID NO:711:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

GAATTCGGCC	TTCATGGCCT	AGTATGGAAG	GTGGAAGTAA	AACTGAAATG	ATCAGTTCAC	60
ATATTTGTAA	ACTGCGTATT	TTATATCACT	CGCTGGATTA	GGCCCCTAGA	GACAGTGGTG	120
GCTAAGTGAT	AAAGTCTTTG	CGCTTGTGGC	ATTTTATAGT	GTAGTGGGAA	GACAGAAAGC	180
AAACAAGTAG	AGAATCATAT	ATGTAATGTG	ACCTCAGGTC	CAGCTAAGCG	CCAGACAGAA	240
GAAAAAGTA	AGGTGAAGGT	AGAGGGGTG	GAGCAGGAGG	AAGGTGTTAT	TTTAGGTAAA	300
GTGGCCAGGG	AAGGCCTTTT	GAAGAATTGA	TATCGATTCC	AAAATGATGA	GAAGGTGCAA	360
TTGTGCCACC	ATGGAGGAGA	AGAGCTTTCT	AGGCAGAGGG	CAGGTGCAAA	GATGGTAGGA	420
ACAAACACGG	CTTGTTGAAA	GAACAGCAAT	GTTTGAGGAA	TGAGCCAGAC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

GAATTCGGCC	TTCATGGCCT	AATTTTGCAT	AAAACCTCAT	CAATCTCTGC	CAATCACTGA	60
GCCCCAAAAC	ATTTTCACTT	TGTTTTAGGT	ATTTATAATA	ACAGCACTCC	CACTTCTCAT	120
GATCAATTC	CATCTTCAGC	GGTTCAGGCT	GCTTTAATAA	AGTTCATAA	CCTGAGTGGC	180
TTTTAAATAA	CGGAATGCAC	ATCTCACAGT	TCTGGAGGCT	GGAAGTCCAA	CAGCAGAGTG	240
CCAGCATAAT	TGGGTCTGG	TGAGAGAGCT	CTCTTGGGTT	TCAGACTGCT	GCCTTCTCAA	300
TGCAGCTTCA	CATGGTGGAC	AGAAAGAGCT	CTCAAGAGTC	ATTTTAAAGG	GCACCAATCT	360
AATTTATGAA	GCCTCCACCA	TAATAAGCTA	ATTACTTCCC	AAAGTGCTGA	GATTACAGCT	420
GTCAGCCACC	GTACCTGCCT	GGGAATTTTT	TTAAAGCTCA	AATTGGATAA	GAGGGTTATA	480
GGAATATATT	CATCTATCAT	ATAGAAAAGA	ATATGTGCTC	AGTCCAGGA	AATAGAAAAT	540
ATATTACCTT	ATTTATACTG	TTTAAATTAA	TGCTTTTAA	AATCTGATTA	ACTCTGGGAG	600
AGCTCGAG						608

(2) INFORMATION FOR SEQ ID NO:713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

GAATTCGGCC	TTCTTGGCCT	AGTGCACTCC	TGTAATCCCA	GCTACTCGGG	AGGCTGAGGC	60
AGGAGAATCA	CTTGAACCCA	GGAGGTGGAG	GTGCACTGA	CCCAAGATCA	TGCCACTGCA	120
CTCCAGCCTG	GGTGACAGAG	CGAGAACGTC	TTAAAAA	TTAAAAA	AAAAAAAGA	180
TTGCACAAAT	CAGACAGTGA	CCCAGAGCTC	AGCCTTGAGG	AAAGTCAGTG	TTGGGGAGGG	240
GAGGGCAAAG	AAGCAAGTAA	AGGTTTAGCA	GACATGGCAC	CTCAGTCTGG	ACTTGAAGGA	300
GGGCTAGGCA	CAAAGGAAGG	GGAACATGTC	AGATGAGAAA	CACGTGAAGG	TTCAGCCAGA	360
TGAGCAAGGA	AGGTTGGTTA	GAAAGAGGAG	CTGCTGGTGT	GGCTCCTGTG	AACACAGGTA	420
GATAGGGCAC	GATAGAGTCA	GGCAGTTAGA	AGCCAAGCTG	AGGAATCGAC	ACTTGATTCC	480
ATAGGTAAGT	AGGGGAACCT	GAGGATGTTT	AATCAGAAAT	GAGATCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:714:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```

GAATTCGGCC TTCATGGCCT AATTTATCCC ATCCTTATCC CATCCTTATA AGGAATAATG      60
TATTGAATAA AGATTGTATC AGTATTTGTA ATTCAATAAA CCAGAACTTG TGGAAATAAA      120
TATGTAGGAG ACATAAATAT GGTGTCCTCA AATTGAATTA TGTGGGAAAA AAGTGGGGTG      180
GAGTTAAAGT CCAAGCCAAT AAAGTTGTAA CATTAAAGAA AGACAGGTAT GGGATGCAAG      240
GTGCAAAGAA AAGGTCATCA TATCTCATAC TGGGGTGAGA TAGAAGACTT CCTGAAGTAG      300
GCGATGCCTA TATTGAATCT ATAAGGACAA ACTGGCATCA ATATGTCAGG GAAGACAGGT      360
TGAAGGTGGT CCTGCCAGAG AAAGGAGCAA GGATAAAGGC AAGGAAGCAT GTAACGTAAT      420
TGTTTGTGGA GAAACCTCAA ATCGGCTGAG GAAAAACGAC TCAGGTATGT AGTAGGGCAC      480
AGTATAAGTA GGTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:715:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```

GAATTCGGCT TCATGGCCTA GAGATTTAAT GTTCCCTTAC CTTGCTGGAG GAACATCAAT      60
GTTGGAGGAA ACAACTTTC TTTTGTGCTC AAGGAGACAG ATGGAGCGAG TGTTCCTTT      120
TTCATGGTCA AGGATCCGGC TGGCTTTTTT GGTGTCTGCT GTTTTCACAT CTCCTCCAT      180
GGCCAAGGAA AACACGTGTT GATGAGACAT TTTTATACCA CAGTCACGTT TTAAGTCCTC      240
TGAATGAAAT GTGAAGTCA TTTCCCGCTT AATGCTCCCC ACCTGTGAAA TGAACACAG      300
AAATCTTAC TCACATAAAA CATCACCTTT GTACGACTAC TGCAGATGGC GGTGAGGAGA      360
GATTACAGAC ACTGTCCTTC CTGTCATCT GAAAGATTGT ATAATTITAA TAAGAAAAAT      420
GCAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:716:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```

GAATTCGGCC TTCATGGCCT AGACCTTCTG GGTGAACGAG GGCAAGCAGC CCAAGTTCCG      60
CTGCTACGTG ATGGGCAAGC CCGAGCCCGA GATCGAATGG CACTGGGAGG GCCGCCCGCT      120
GCTCCCGGAC CGCCGCCGCC TCATGTACCG CGACCGCGAC GCGGGCTTCG TGCTCAAGGT      180
GCTCTACTGC CAGGCCAAGG ATCGTGGGCT CTACGTCTGC GCCGCGCGCA ACTCGGCGGG      240
CCAGACGCTC AGTGCCGTGC AGCTGCACGT GAAAGAGCCC CGCTCCGGT TCACACGGCC      300
CCTGCAGGAC GTGGAGGGCC GTGAGCACGG GATTGCCGTG CTGGAATGTA AAGTACCCAA      360

```

CTCCCGCATC CCCACGGCCT GGTTCCTGA GGACCAGCGG CTGCTGCCCT GCCGCAAGTA 420
CGAGCAGATC GAAGAGGGCA CTGTCCGGCG CCTCATCATC ACAGGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

GAATTCGGCC TTCATGGCCT AGCCACTCTT AGCAACACAG ATTTTCTTCC AAATTATGCC 60
TTGAAGCTGC TCCCGGAGCC ACCCGCTCAT CAGCACCTG CTCCTGTGGT CCTTCTCGTG 120
AAAGGCAGAG GGGAGATGCC TGTTGCCCGC AGTCTTCTCT GCAGCTGCCG TGGGAACAGG 180
CACCTTCCCC GCTGCTGGGG ACACAAGGAG GGGGAGTCAC CGTGGCTTGC TCACTTTCCA 240
GATCAGCCAA CTGCAGAAC TTTGTTGTTG TTTAGATCCC ACGTCTGACG GTTTAGAACA 300
GCTTTTATAA CATGGTTAAA CATGTTTACA AAGCAAGGGA GACATCTCTT ACCTTGACAA 360
CACGAGGCTC CCACAGACCG CCTTCCCCCA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:718:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

GAATTCGGCC TTCATGGCCT AGAAGGAAAG AAATTTTATG TGAGAGAGCA TCTTGATGG 60
CAAATTCCTG TCCTAAAGTA GAATGACTAG GAAAGAGCAA AATATAGGAC AAGTCAGAAA 120
GTCATAAGAT GGGAAAGAAA AACTTACAAC TGCTAGATCT TCTCCTGTCT AGAAGTGTG 180
TGTGTGTGAT GCTTATATGA AGGTACTCTA ATTAATTGGA TTAAGAGAAA ATGAAACCCC 240
ATCTTACTA AAAATACAGA ATTAGCCGGG TGTAAGTACA CATGCCTGTA GTCGCAGCTA 300
CTCAGCAGGC TGAGACAGGA AGATAACTTT AAGCCAGGAG TTGGAGGCTG CAGTGAGCCA 360
AGATCGCGCC ACTGCACTCT AGCCTGGGAG AGACAGAGCG AGACTCCGTC TCAAAAATGA 420
AAAAGTAGAG CCTGGTAGAG TGAAGCCACT TGCAGGAGTC GTTTAGTTAG GGCTGTGTTG 480
CCTTACAGTG CTGGTGTCTT CACAGATGAT AATAGTAATA AAAAACACCA CAACTCGAG 539

(2) INFORMATION FOR SEQ ID NO:719:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

GAATTCGGCC TTCATGGCCT AGGCAGTGA TAATTGCTCT CTGGAGGAAC CATCTGTGAC 60
ACATTCTACA TGGTTCCTTA GAGGGTCCCC AAGTGGGATT GAGTCCCTCT TGTTCTAGC 120

AGTAAGCAGT	TCTGTTATAC	ACTCTTTATA	TGCTTTTCCT	CCTTTCCTCT	CTCAGTCTCT	180
CTGATCCTTC	CACCTGTGCT	CTGGGTTTAC	CTCTCAAGTA	AACCACCTGC	ACACAAGTCC	240
CTGTCTCAGG	CTCCATTGCG	GGAAACCAAA	CTAAGACACC	ACCTCAAAAC	ACAGAATTTT	300
ACGAGGCTCC	AAATGCCTCA	GAAAAGTAAT	GTAAATATAA	AATGACCAAT	TTTTTGAAGT	360
ATATTAATCC	TAGTTATTTA	ACTCCGAG				387

(2) INFORMATION FOR SEQ ID NO:720:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

CCCGTGTATA	GTTTGCAAAT	ATTTTCTCCT	CTTCTGTAGG	CTGTTTACTC	TTGTTGATAG	60
TTTCTTTTGC	CATGCACAAG	CTTTTGGT	TAATTAGATC	CCATTGTGCA	ATTTTGTCTT	120
TTGTTGCAAT	TGTTTTTGGC	GTCTTCATCA	CGATATCTTT	GCCAGTTCCT	ATGTTCAAAA	180
TGGTATTACC	TAGGTTGCCT	TCCAGAGTTT	TTATAGTTTT	GGGTTTTTAT	TTACTCGAG	239

(2) INFORMATION FOR SEQ ID NO:721:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

CTCGAGCACT	ACCCTAGACG	GTCTCATCAC	TATACTGGCT	CCTCCTTACC	CCCGTAAATC	60
TCCCAGGTAC	ACTTCTGAT	CACCCTCCGG	ATACCTCATC	CCTATCTATT	CCTTTTATAA	120
ATAATTCCT	GCTCCTCCT	CTCACCCACA	ATCCAATCGC	AGTTCAAGGC	CTCACTGCCA	180
TGCATCCAC	TGTCTGTGAG	TGCTTCCCAA	TATGCCCCAG	GACCCCTCCT	GGTGTACGCG	240
TCTGTATCCT	GACACCCCTT	GTAGACGAGT	CCCGAAATTC	CCGCCCGTC	CCTGGAGCTC	300
CCTAGGCCAT	GAAGGCCGAA	TTC				323

(2) INFORMATION FOR SEQ ID NO:722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

GAATTCGGCC	TTCATGGCCT	AGGCCTGTGG	AGCCCCAGCT	CTGGGTCCCT	AGCCCCGGTC	60
CAGGCAGCCA	GGCTCCCTCC	TGAGCTGAGA	AACGGAACCT	CGCGAACCAC	TGGTGGCACA	120
TCCTTCTCCT	CCCCCGCCCC	TGATCACCCG	CCCCCGGATC	AGAAATATAT	CTATATTCTC	180
GACTAAAGTC	TCATCAGGAA	ATATTTCTCTG	TCTTTTATTT	TAAGCATCAA	ATTGTTTTAG	240
TTGATTTAAA	AAGGAAAAAA	TACAGACGAC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:723:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

```
GAATTCGGCC TTCATGGCCT AAGAAGCAAC AATCATATTA GCTGGGGGAG GAGGATAGTT      60
TGGTATTTTT GTAGTTTGCA CAGTGACCTT TTTAAAAATC TGTTAGGCA AAAATAGTGT      120
GATCTTGTTT GTTGTCTCAC TTCATTATGA TCACAGAATG ACCTGGTATG ATGTTAGTGT      180
TTTATGAGAG TGTTATGTTT TAACAGGGGA ACACCGCAGT CAATTCCTAA CAACACTAAA      240
GTGTCAGTTC TGTTCTGTGAC ACCAAGGGCT GTTTTCTTT TTCTCATATA ATGTTGAGGC      300
AACCAGGAAG ACTCGAG                                     317
```

(2) INFORMATION FOR SEQ ID NO:724:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

```
GGCCTCAGCA GGTGTGAAGC GTGTGCTTTA GTTTCGTGGG AGGCCTGGCA TCCCCGAGAG      60
GGAGGGGAAA GGTAACCACT CCTTTGTGGA GGTCCGCGAG GTGATTGTCG TGGATTGCA      120
CAGTCGGCTG GCGGTGCAA TGGCGGAAAG AAAAGGAACA GCCAAAGTGG ACTTTTGAA      180
GAAGATTGAG AAAGAAATCC AACAGAAATG GGATACTGAG AGAGTGTGTTG AGGTCAATGC      240
ATCTAATTTA GAGAAAGCAG ACTCGAG                                     267
```

(2) INFORMATION FOR SEQ ID NO:725:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 354 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```
GAATTCGGCC TTCATGGCCT AAGTCAGTGG TAAGCCGCAG CAGTTTCCTG CCACTCGTAA      60
TATGGCAATT AAAAATTTTA AATTTGTGGC TGCTTGGGGT CTGGGAGGTG ACCTGCTCCT      120
CAGCAAATTT TGA CTGATAA ATTAATGCCT GGGTCTTCAG CCTGGTTCTT TGCTGGCCAG      180
TGTGACAACA GTCTGTCAG TCTCTGGGGG CACATTATAA TTAACAGATG TAATCTTTCT      240
CCGGTTCAGG GTCATCTGTG AATCAGGGGT ACTGCCCCAG TAGAACTAGG AACATCCAGC      300
AAAAGACTGT TTTCAAATA TACAATTAAG TGAAAAAGC ATGAAGAACT CGAG          354
```

(2) INFORMATION FOR SEQ ID NO:726:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

```
GAATTCGGCC AAAGAGGCCT AGAGGTTGAC CTGAAAAACA ATGAAACACA TGAACACACT    60
TCCGATTTTC TCCTCGCTGA TTAGCTTCCT GCCTGCTGTC AGTGCTGGAC GAAGTGCTAT    120
AACTACTTTA TGTAACATTA CAGAACAGCT CGAG                                154
```

(2) INFORMATION FOR SEQ ID NO:727:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 338 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

```
GAATTCGGCC TTCATGGCCT AGTGGGAAGA TGTGGATGAT GAGAAGGGAG ATAGCAATGA    60
TGACTATGAC TCTGCAGGCC TATTGTCAGA TGAAGACTGT A*GTCTGTGC CCGGAAAAAC    120
TCACAGAGCT ATAGCAGATC ACTTGTTCTG GAGTGAGGAA ACAAAGAGTC GCTTCACGGA    180
GTATTCGATG ACTTCCTCAG TCATGAGGAG AAATGAACAG CTGACCCCTAC ATGATGAGAG    240
GTTTGAGAAG TTTTATGAGC AATATGATGA TGATGAAATT GGAGCTCTGG ATAATGCAGA    300
ATTGGAAGGT TCTATTCAAG TAGACAGCAC GACTCGAG                                338
```

(2) INFORMATION FOR SEQ ID NO:728:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 433 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

```
GAATTCGGCC TTCATGGCCT AATTGAATTC TAGAACTCTC CCAGAGAAAC CAGGCAGATA    60
CTGCTCCACA CCGGTGAGCT GCTTCTCACC TGGGTAGTCT AGGGTGGTTT GCTCCAGAAT    120
TGTATTCTG CTTTTCTTT TTTTAACTTG GCAGTGGTTA ACCATTCCCT GGAGCAGCAC    180
CAGGTAAGTC AGCTTGATC AGAGTCATCT GCTTTACCTG ACATGAGCAC ACGTTGTCAT    240
ATATTTGCAC ATGCAGATAT CATATGTTAA ACAATATCAC ATTGTTGAAG AAAATTACAC    300
TGGAAAGCGT AAAATATAGT TTGGATGCCA TATTGAGTGT AACTTAATCC ACCCGATTCA    360
GAACTTTTGT AGAGTGCCTC GGAGTTCCTA TTTGGAAATA TCAGTTAGCA GTTTTAGTCA    420
GTAGAGACTC GAG                                433
```

(2) INFORMATION FOR SEQ ID NO:729:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

GAATTCGGCC	TTCATGGCCT	AACAAGAAAC	ACCAAGTACC	TCGACCTCAA	GAATTCACAA	60
GAGATGCTCC	GCTACAAAGA	GGTCTGCTAC	TACATGCTCT	TTGCCCTGGC	TGCCTACGGG	120
TGGCCCATGT	ACCTGATGCG	GAAGCCCGCC	TGCGGCCTCT	GCCAACTGGC	TCGGTCCTGC	180
TCGTGTTGCC	TGTGTCCTGC	GAGGCCGCGG	TTCGCCCTG	GAGTCACCAT	CGAGGAAGAC	240
AACTGCTGTG	GCTGTAATGC	CATTGCCATC	CGGCGCCACT	TCCTGGACGA	GAACATGACT	300
GCGGTGGGAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

GAGTTGTCTC	TCTGAATTAA	CTTTCTCACC	AATAGCTCCT	CTTTAAGATC	AATAACTCTT	60
ATGTTTGCAC	TTTTTAGGCT	ATTTTCTAGA	TCTTGTATGT	GTGTCTTATT	ATTTTTTATT	120
CTTTTGTCT	CCTCTGTGAA	TTTTCAAATA	GTCGAG			156

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

GAATTCGGCC	TTCATGGCCT	ACTTGAACCT	AGATCTCACC	CCCAGGATGT	TGCGGAGGCT	60
GCTGGAGCGG	CCTTGACGCG	TGGCCCTGCT	TGTGGGCTCC	CAGCTGGCTG	TCATGATGTA	120
CCTGTCACTG	GGGGGCTTCC	GAAGTCTCAG	TGCCCTATTT	GGCCGAGATC	AGGGACCGAC	180
ATTTGACTAT	TCTCACCCTC	GTGATGTCTA	CAGTAACCTC	GAG		223

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT AAATTATTGC AAAGTGTATA TTGGTTAAAA AAAAAAAGGA      60
GGAAGAGGCCA GTTTTTCATG ACGGTTAAAA GTGCAGGATT TGGAGTCCCA TGGTCCTGGG      120
TGTGAATCCT  GGCTGTGGCA CTAACCTATCT GTGTGACTGG CTGTGAACCT CTCGTGCCTC      180
ACTTTCTTCA TCTGCAAAAT GGGTAGTTGT ATAGCAAATG CACATAGAGA ACACCTTAACA      240
CTTTGGCACA TTGGAAGCAC TCAGTAAATG TTAATTGTTA TTATTGTTGC TCTAAAGAGA      300
ATCCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:733:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```

GAATTCGGCC TTCATGGCCT AGATTAAATC TAGACCTGCC TCAGCTCCAC TCCTTATGGT      60
TTGCCACCAT AACCTACAAC ATTTGTCCGT CCACCCACG TGTCTTCTC CTTTGTGGCA      120
GGAATCTTA TCTCTGCCTA CCAACCAATT GGTGAGGAGC ATGCACCCTA GTGTCTCAAT      180
CTCCAGACAT TAACATCCTG CCAAACAACC AGACCATCCA GGTTCCTTTA GTGACCCTA      240
TCTCATCCTC TTCCACATGC AGTAGGCAGG TCTAG                                     275

```

(2) INFORMATION FOR SEQ ID NO:734:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

```

GCAGATCAGA GGCACGTTTC CCACAACTGC GAAGAGGCGC TGAGGCAATT CTGCAAGAAG      60
ATTTTGGGGT TTTGGAAAAG AAGCTATGGA AAACGGAGGG GCAGGCACTC TGCAGATAAG      120
GCAAGTCCTG CTTTTCTTTG TTTTGCTGGG AATGTCTCAG GCGGGCTCTG AAAGTGGGAA      180
CTTTTGGTG ATGGAGGAAT TGCAGAGCGG GAGCTTTGTA GGAAATTGG CAAAGACCCT      240
GGGACTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:735:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

```

GAATTCGGCC TTCATGGCCT ACACAGACTG GGCAATTTAT AATGAACAGA AGTTTATTTG      60
GCTCTTGGGT CCAGAGGCTA GGAAGTCCAA GAGCATGGTG TCAAGCATCA GGTGAGGATC      120
ATCACCCCGT GGTAGAAGAT GGAAGGCAGA AGTGAGCGTG TGAGACAGAG AGGGAGAATT      180
GGACTCAACT CATCCTTTTA ATCAGGAACC CACTCTGTCA GTAACGAACC CATCCCCACA      240

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ATAATGGCAT TAATCCATTC ATGAGGCCCC TACCTCTTTT TCTCCCCCG CCCCCGAGA 300
TGGAGTTTGT CTCTTGAGCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:736:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 259 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTCGGCC TTCATGGCCT AAACACATAC CAGATTCTTA GATTCATTG GTGAAGGAAG 60
 CCTCTGAATT AAAACTTTTA AATATTTCTG ATTTGCAACC AGACGAAAAA GAAGAAAATT 120
 GACAACTTT TTGATGCAAC TTGTGAAAT CATGGTGTTC CTGGTTTTTC TGGTCTGTT 180
 TTTGTTGTTG TTTTGTITG TTTTGCCACA GTTTAGTTC TCACCTGATC TTTCTTGTA 240
 TCCACTTCAG AGTCTCGAG 259

(2) INFORMATION FOR SEQ ID NO:737:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 409 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

CTCGAGGCGG TGCCAGACAC GGGTCTCCTC CGACTGGGCG GTGCGTGGA TGCCGCCAGC 60
 GTCCAGGTAC TGCCTGATGC GGATGTAGGC GATGCAGGCT GACTCGTCGC CCATCAGGTG 120
 GATGTGGGGA TTCAGGATGG TGGTGTGCAC GGGCTTGCTG TTCCGGGACC ACAGGTTTTT 180
 AAAATAGAAT CGATGGAAGT CCAGGCCCTC AACCAGGTTT CCCAGGGCCT CAGGTTTCGAA 240
 GGCTGTCTATG CCAGGTCGC ACATCTTCGT GTAGGACTCA AAATCTCCAT TGCTTATGGC 300
 TTCAATCAGC TGCTCTGTCA CTTTATAAT TTCCTGTTT CCACTTTGG TGTCTTCATC 360
 CTCGATGGTG GTGTTGGTGC TCTCTGAGTA GGCCATGAAG GCCGAATTC 409

(2) INFORMATION FOR SEQ ID NO:738:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 466 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTCGGCC TTCATGGCCT ACTTCCCTT CCTTCCTTCC TTCCTTCTC CCTCCCTCCT 60
 CTCTCTCTC TTCTTCTCT CCTTGCCTCC TTCCATCCTT CCCTCCCTCT CTCTCTTCT 120
 TTCTTTCTTT CTCTCTCTCT CTCTTCTTT CTTTCTCTCT CTCTGTCTTT CTTTCTCTCT 180
 TTCTTTCTTT CCATCTTCTT TTCTTTCTAT CTTTCTTACT TTTGATGTAG CTGTACGAC 240
 CTAATGAAAA TACTGGCATG AGTGATGCCA CCTTTAGATT CTCCACCTTC CTGTTCTGT 300
 CCTATTCAAC AACATGAATT GGTGTTGGC TGTAAGTACT TGGTGGGTTA TTGCTCATAG 360

ATTGAGTTGC ATTTTGTCTG AGATAGTGCT GTTACCAAAA GCAGGGGTGC TGCTTGAAGA 420
AGTAAACCTA ACTCTGAAAA ATAGAGACTC TCCGAAACA CTCGAG 466

(2) INFORMATION FOR SEQ ID NO:739:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC TTCATGGCCT ACATTCTGCA AACTATTTTG TTATTAGCTT TTTCACCTAA 60
AAATAGCCCT GCTTGCAAGC AGGCTCTGTG GTGCAATGGA TAGCGCATTG GACTTCTAGC 120
CTAAATCAAG AGATTCAAAA ATAGCCCTGC TAAATATTTG CAATCTTTCC TACGCTCCTT 180
TTTCCCCCAA AGTGACTTTG GATATCCAGA GTTACCAAAT CTAGTATTTG AAGTCCTTAG 240
GTTTGACGGT TGAAAGTGAA AGGCAAGCTG TTTTAATGAA AATTCCTAAC TGAAGAGAGC 300
GGAGACIAA GATGCTTAA TTTGGTCAC ACCTGAGCGG TATTTGTTTG CATGGCAGGA 360
GCTCGAG 367

(2) INFORMATION FOR SEQ ID NO:740:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

GTGATGGACA AAGACAGGGA AGGCCTCATC AGCAGGGATG AGATCACAGC CTAATTCTATG 60
AGAGCCAGCT CAATCTATTC CAAGCTGGGC CTGGGCTTTC CTCACAACTT CCAAGAGACC 120
ACCTACCTGA AGCCCACTTT TTGTGACAAC TGTGCTGGAT TTCTCTGGGG AGTGATCAAA 180
CAAGGATATC GATGTAAAGA CTGCGGGATG AACTGTCACA AACAATGCAA AGATCTGGTT 240
GTGTTTGAGT GTAAGAAGCT CGAG 264

(2) INFORMATION FOR SEQ ID NO:741:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 318 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

GAATTCGGCC TCATGGCCTA CACGACCAGC ACCGCCACTG CCACCTCACA GCCTTTCCTC 60
TTCGGGGCGC CCCAGGCCTC TGCTGCCAGC TTCACCCCGG CCATGGGCTC CATATTCAG 120
TTTGGCAAAC CTCCTGCCTT GCCCCAACC ACCACAGTCA CCACCTTCAG CCAGTCCCTG 180
CCCACTGCCG TGCCAACGGC CACCAGCAGC AGCGCTGCCG ACTTTAGTGG TTTTGGCAGC 240
ACCTCGCCA CCTCCGCCCC GGCACACAGC AGCCAGCCCA TTCTGACGTT CAGTAACACG 300
AGCACCCCCG GCCTCGAG 318

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

GAATTCGGCC	TTCATGGCCT	AAGAAATGAA	AAAGATTATT	GAAACTATGC	CAATGACTGA	60
GAAAGTTGAA	GAATTGCTGC	GTGTCATAGG	TCCATTTTAT	GAAATTGTGC	AGGACAAAAA	120
GAGTGGCAGG	AGTTCTGATA	TAACCTCAGT	CCGACTGGAG	AAAATCTCTA	AATGTTTAGA	180
AGCTGAAAGC	AGTGACAGTG	GAGCCGAGTC	TGAGGAAGAA	GAGGCCCAAG	AAGAAGTGAA	240
AGGAGCAGCC	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

GAATTCGGCC	TTCATGGCCT	ATGTTTTTAT	AGCACCGATG	GTACTGTTTT	ATTTATTGCC	60
AATAGACCAC	AACATTCACA	TCTGTTTTTC	CTCAAGGGAA	CCGTATTGTC	TTTGGTTGA	120
AGGATTTATC	TATTTGATAC	TATCCAGAAT	ATTGTGAAGC	TATAATTTCC	TGGGTATAT	180
TTTAGATGGG	TTGTCTGCAT	GGTGGTAAAA	TAAGCTTTTT	CCTCTCGCCT	ACGTCCTTTG	240
GAAGATCTCC	TGATCATACA	TAAGTAGGTA	GGGCTTATTC	TTGCTGCCGG	AGCTGGGCAC	300
CCAGCTCTAG	ACTGTTTCTT	TGAGCATTAC	TGCAGATTGG	AGACGTGTGT	GAGAGGAGCA	360
GCGCTCAGAA	ATAGGGCTTG	AGGCTCAAGC	AGAAACTGAA	GCTCTCATTC	AAATGAAGAT	420
GCTCTCTCTA	CCGCACGATC	GGCAGTGAGA	AAAGGAGGAT	GAAAATCCTT	CTCATCACAA	480
AGAGCTTGAA	GGAACCCACG	TCCCCAGATT	AGCAACCCTA	GAGTTCATCT	GCTCAGGCCG	540
GGAAATGTGT	AAGCTTCCTT	GATCAACTCC	AGGCCTCGAG			580

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

GAATTCGGCC	TTCATGGCCT	ACCCAGAGAC	TCGCGGACGC	TCACGATAAC	CAAGGACGAC	60
CGCGAACCAC	GGGCAAAATA	ACATGGCAGC	CAGACGAATT	ACACAGGAGA	CTTTTGATGC	120
TGTATTACAA	GAAGGAGCCA	AACGATATCA	CATGGATGCC	AGTGGTGAGG	CTGTAAGCGA	180
AACTCTTCAG	TTTAAAGCTC	AAGATCTCTT	AAGGGCAGTC	CCAAGATCCA	GAGCAGAGAT	240
GTATGATGAC	GTCCACAGCG	ATGGCAGATA	CTCCCTCAGT	GGATCTGTAG	CTCACTCTAG	300
AGATGCCCGA	AGAGAAGGCC	TGAGAAGTGA	CGTATTTCCA	GGGCCTTCCT	TCAGATCAAG	360

CAACCCCTCT CGAG

374

(2) INFORMATION FOR SEQ ID NO:745:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 323 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

GAATTCGGCC	AAAGAGGCCT	ATTGGTTTCC	CTGCTTCCAT	TCTTACTCCC	CTACACTCTG	60
TTCTCCAAA	AATAACCATT	GTGATCCTTT	AAAATCCTGA	CTCTCTCCTG	CTCAGAGTCA	120
TCCAGTGGCT	TCCCATATCA	CGTAAAATGA	AACCCCAATC	GTCCTTACT	CTGGCTGCA	180
GGGGCTGTG	TGATGGGCCT	TCTCCAGCTT	CGTTCTTCCT	TTCCTTCTGT	TCTCCCTCT	240
GCTTACCTAC	TCCATCTCCA	GGGCTTCTTT	CCAGCTCAAG	CCCTTTCCTG	TTGAGAGCAT	300
TTGCTTTCCC	CAGGGCACTC	GAG				323

(2) INFORMATION FOR SEQ ID NO:746:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 273 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

GAGAACAGTG	TTACCAAAGA	AAAGGACATG	TTCAATTTC	AACGAGCCCA	GGAGGACATC	60
TCTAGACTTC	GCAGGAAGCT	GGAGACCACA	AAGAAACCAG	ACAATGTACC	CAAGTGTGAT	120
GAGATTCTGA	TGGAAGAGAT	TAAGGATTAC	AAGGCACGCT	TGACCTGTCC	ATGCTGTAAC	180
ATGCGTAAAA	AGGATGCTGT	TCTTACTAAG	TGTTTTTCATG	TCTTCTGCTT	TGAGTGTGTG	240
AAGACACGCT	ATGACACCCC	CCCCGCGCTC	GAG			273

(2) INFORMATION FOR SEQ ID NO:747:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 666 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

GAAGATCTTC	GCTGTCTCT	CTGCCTCTAT	CACACCAAAT	ACAAGCGCAA	CATGATTGAC	60
CACATCGTGC	TGCACCGAGA	AGAGCGTGTT	GTCCCCATTG	AAGTTTGCCG	GTCCAAACTG	120
TCCAAATACT	TGCAGGGAGT	AGTTTTCGCG	TGTGATAAGT	GTACCTTCAC	CTGCTCCAGT	180
GATGAGAGCC	TCCAGCAACA	TATAGAAAAG	CACAATGAAC	TGAAACCTTA	CAAATGCCAG	240
CTCTGCTACT	ATGAGACCAA	GCACACGGAG	GAACTGGACA	GCCACCTTCG	GGATGAGCAT	300
AAGGTAAGCC	GTAACCTTGA	GCTGGTTGGA	CGGGTTAACT	TGGATCAGCT	GGAACAGATG	360
AAGGAGAAAA	TGGAGAGCTC	CAGCAGCGAT	GATGAGGACA	AGGAAGAAGA	AATGAACAGC	420
AAGGCTGAAG	ACAGAGAGCT	GATGAGATT	TCTGACCACG	GGGCTGCTCT	TAACACTGAG	480

AAGCGTTTTC	CATGTGAATT	TTGTGGACGG	GCGTTTTTAC	AGGGCTCTGA	GTGGGAAAGA	540
CATGTGCTGA	GACACGGCAT	GGCATTGAAT	GACACCAAGC	AGGTGAGCAG	AGAAGAAATC	600
CACCCAAAAG	AGATCATGGA	GAACAGTGTT	AAAATGCCCT	CCATAGAGGA	AAAGGAAAGT	660
CTCGAG						666

(2) INFORMATION FOR SEQ ID NO:748:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 379 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

GAATTCGGCC	AAAGAGGCCT	AACAACCGAA	TATAGTACAC	GACCTTCCTG	CAGCAGTTCT	60
AAGCTACTGT	CAAGTATGGA	AAATCCCGGC	AATTCTGTAC	TTGTGTTATA	CTGATGTGAT	120
GAAATTAGAC	CTAATCACAG	TGGAAGCTTT	TAAGCCTATA	CTTCTACCA	GAAGCTTGAA	180
GGGTTTGGTT	AAGAATATTC	CCCAAAGCAC	TGAGATACTA	AAGAAATTGA	TGACAAACNA	240
TGAGATTCAG	AGTAACATT	ATACATGATC	TAAACATTG	TTTTGTAGTG	TATATTACTT	300
GTCCATTCT	TTAAGGGGAG	CAGCCTGCAC	TCTTTGTAG	ATTACTTTTG	GGGGATATAT	360
TTTGAGAATG	ATGAAACGG					379

(2) INFORMATION FOR SEQ ID NO:749:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 335 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCGGCC	TTTATGGCCT	AGGCGCAAGG	CCGAGCGTTC	CCAGCAGGGG	GAGAAACCTT	60
TCACACCCCA	GGCCCTTCAG	GAAGTGGGGC	CTTGCCCTTG	AGCCACATGG	CCCCATCCCA	120
GTTGGGGAAG	CCAGGTGAGC	TCTGACCCTT	GGGCTGGGGC	CTCTGCCCCC	CCCAACCCAG	180
CCCTCGTCTC	CCTCGACAGC	GCCCCTGCTG	TCTTCCCCAC	CGCAGTCACC	ACCACCCGAA	240
ATGCCACGTG	GTCACTGTGC	ACTGCCCTGT	TCATGTGCCT	CTGCGGGGCA	GGGCCTTCCT	300
GGTTTTGTTC	ACTGCTGTAC	CCAGATAGCC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:750:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 648 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GCAAAGACCC	AAGAACTGAA	TATGCTCCGG	GAACAGACCA	CTGGGCTGGC	AGCTGAGTTG	60
CAGCAGCAGC	AGGCTGAGTA	CGAGGACCTT	ATGGGACAGA	AAGATGACCT	CAACTCCCAG	120
CTCCAGGAGT	CATTACGGGC	CAATAGTCGA	CTGCTGGAAC	AACCTCAAGA	AATAGGGCAG	180

GAGAAGGAGC	AGTTGACCCA	GGAATTACAG	GAGGCTCGGA	AGAGTGC	GAAGCGGAAG	240
GCCATGCTGG	ATGAGCTAGC	AATGGAAACG	CTGCAAGAGA	AGTCCCAGCA	CAAGGAAGAG	300
CTGGGAGCAG	TTCGTCTACG	GCATGAGAAG	GAGGTGCTGG	GGGTGCGTGC	CCGCTATGAG	360
CGTGAGCTCC	GAGAGCTGCA	TGAAGACAAG	AAGCGTCAGG	AGGAGGAGCT	CCGTGGGCAG	420
ATCCGGGAGG	AGAAGGCCCG	GACACGGGAG	CTGGAGACTC	TCCAGCAGAC	AGTGAAGAA	480
CTTCAAGCTC	AGGTACATT	CATGGATGGA	GCCAAGGGCT	GGTTTGAACG	GCGCTTGAAG	540
GAAGCCGAGG	AATCCCTGCA	GCAGCAGCAG	CAGGAACAAG	AGGAAGCCCT	CAAGCAGTGT	600
CGGGAGCAGC	ACGCTGCCGA	GCTGAAGGGC	AAGAAGGAGG	CGCTCGAG		648

(2) INFORMATION FOR SEQ ID NO:751:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GGAAAGAATC	TAAAAGAAGA	GAAGCGACCG	GTGCTTTTAA	GGGTGTCTAA	TTTCAAAAG	60
AGACGTCTGG	GAGTATTTTG	CTCTGGGCGT	TTGGGTGAGC	AGGACCGGGG	CGTTGGAGGG	120
TGCGGCGGGC	TTGGGAGCAG	GGAAGGTTCC	GAGTCCTAGG	GAGGCGGCAG	CGCTCGGCTA	180
TGCCCTCTGG	AGACTGGCGG	GGCTGCGGGG	CCGAGGGGAC	CCGCGAGGGA	GCCGCGCTGC	240
GGACGCGCTG	AGCGCGGGAG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

GAATTCGGCC	TTCATGGCCT	AGGATGTTTT	AAGGCTAGGC	CTGAGCGAGG	AGGAGGCAGG	60
GGAGACCTGG	CAGGTATTGA	AGTACCTGGG	AAGAAAGGCA	ATGGGGATGG	TGGTCCTGCT	120
CCAAGATGAT	AAGTGGAGGC	TGAGCGTCAC	TGGTACTGGG	GGCCATGATC	CCCAGGGCCA	180
CCCTGGCACC	AGGGTGCAGG	GGATGCGGGG	CCTGAGCAGG	AAGAACAGAG	ATCTGCGGGC	240
TGCACCGACC	CATCCCTGCC	CCTAGGCTGA	AGAACGGCAT	CACTCGAG		288

(2) INFORMATION FOR SEQ ID NO:753:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

GAATTCGGCC	TTCATGGCCT	ACTGAATTG	CTTTTCTTGC	CTCTCTTTAG	TCACCTGTCA	60
CAGGAGGTTT	CTGCTCAGTA	ATGATATTGT	GAGTTAGGAT	AATAACTTTT	TTTTTTTGT	120

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GCTTCAGATT TAGAAGAAAA GATCCTGTTT CCATTGAAA GGAAGTGTAA GCTTTTATCT 180
TTTAACCAAC TGAACAATAC ACCAAAAGCA GCCTAGGGAT GAGCATTCTT TTGAAAGCAA 240
TTAGGTTATT CACCTGGTAT TAAACTATT TACTGTAAA AAATCTGTGA CTTTCATGAAG 300
TTGATTTTAA AAGGCAGCAT CAAAACTGA AAAGGAAGGG AAAAAATAGG CAGCTTCTCT 360
GCACTTGTTC GGAGCTCCCC AAAACAGGAG CCATGGAGAA GTGGCATCAA GACCGGGCTG 420
CCCTTTCGAG AACACCCTGT GGCAGTTCAG AGACACGCTT TTCCTACACT GCATGCAGCC 480
GCTCGAG

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(2) INFORMATION FOR SEQ ID NO:754:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

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TGTTGGGT TA GGCATCCTC TTGCTTCAGC CTCCCAAGAA GCTGGAGCCA CAGGCATGCA 60
CCACCACGCC CAGTTAATTT TTGTATTTT TGTGGGGACG GGGTCTCACT TTGTTGCCCC 120
GGCTTATCTG GAACTCCTGG TTTCAGGCAG TTCTCCTTCC TTAACCTCCC AAAGTGCTGA 180
GATTATAGGT GTGTGTGAGC TATCACACCT GGCCTAGAAA ATTATAAGAA AATATTAATC 240
ACATAATCTC ACTACCCATT GATGATTTAA CATCTAGTAT ATACATATGT ATATATAATT 300
TTAAAAGTAG GGTTATATTA TATAATTACT TCATTATTCT TGTTTTCCAC TTAATATACT 360
TAAGATATCT TTCAAAATCA CTAAATACAG GAACATAGTA TATCATCTTT CAGTAGCCTC 420
ATTGTATAGC TAACCCCTC GAG

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(2) INFORMATION FOR SEQ ID NO:755:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

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GAATTCGGCC TTCATGGCCT ATTGATTTC TGGGCTCAGG AGAGGATGGG GAAGGGGCTC 60
CAGACCCTCG GCGGTGCACT GTGGATGGGA GCCCCCATGA GCTGGAAGC CGTCGGGTCA 120
AACTCCAAGG CATTCTGGCT GACCTGCGGG ATGTGGATGG GCTGCCCCCA AAAGTGACTG 180
GCCCCTCTCC TGGCACACCC CAGCCCCGGC CACATGAAGG TTCCTTTGGC TTCTCCTCAG 240
ACGTCTTCAT CATGGACACT ATCGGGGGCG GGGAGGTGAG CCTGGGGGAC TTGGCAGATC 300
TCACCGTCAC CAACGACAAC GACCTCAGCT GCGATCTGTC TGACAGCAA GATGCTTTTA 360
AGAAGACGTG GAACCCCAAG TTCACCTGCT GCTCGCACTA CGACGGCATT CGTTCCCTGG 420
CCTTCCACCA CAGCCAGTCG GCTCTGCTCA CCGCTCCGA GGACGGCAGC CTCAGCTCT 480
GGAACCTGCA GAAGGCGGTC ACGGCCAAGA AGAATGCGGC GCTAGATGTG GAACCTATAC 540
ATGCTTTCCG GGCTCACAGG GGCCAGTGT TGGCTGGACT CGAG

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(2) INFORMATION FOR SEQ ID NO:756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

GAAATTAATAA	AAATAAAATC	AAGTTCTTGG	GTGGTGGGAA	ATTGGCCTGT	ATTTTTTCTT	60
CTCAGTGGAA	TTTGCTGAGT	AAAAAATTAT	AGGCTCAAAA	ACTGAGAACT	TTGAAGATAT	120
TGCACCATAT	TCTTTTGTG	TTGAGTGTG	CTGATGAGAA	GTCTGAGGTC	AGTCTGTTGC	180
TTGCTCTTTC	TAGGTAAACT	GTGCTTTTGA	TATTTTTTCC	CCTCTAGAGG	TTTTGAGAAT	240
TTACTCCTTA	TCCATGTTAT	TCTTAAATTT	CACCACATTC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

GAATTCGGCC	TTCATGGCCT	AGAATGCTTT	GAATCCATAT	CTTTTTCAGA	AACATACATG	60
GAAATACAGA	ACTACACCTG	TAATTACAGA	GGGCATATGA	ACCCTAGTTT	GATAAGCCTT	120
GCTTTAAAGG	ATGCAGTGTG	TTCTATTAAA	TGTATTTAAT	ACAATTGCAG	AAATGGAAAA	180
TGTGGACCTC	CATTAAACAA	ATTTTTTAGT	TCCTAATGAG	ATAAACTTGG	GACCAAACCG	240
ATTCCTCTTG	TTTGTAGTCT	CAAAAATAGT	TTCATTTTGA	GGTATTTATG	CTTTAGTGGC	300
CTTTCTCGAG						310

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

GAATTCGGCC	AAAGAGGCCT	AAGAAAAGAA	AGCAAGAACA	GAAAACGAAG	CCACAGGAAG	60
GGAAGTAGAC	ATTGTATGCT	TATGGTTTCT	CATTATGAAG	GTGCAGCTTG	TAGGAGGTTT	120
GTACGGATGT	GCTTTGAAGT	TATGTATATT	ACATATAACA	GGAAAAAATA	TTAAAATAAA	180
CAGTGCTGGT	CTCGAG					196

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

GAATTCGGCC	TTCATGGCCT	ACAGCAAATC	TGCCTTCACA	TGGTCTGCAT	TCTAGTGGAG	60
AAGTCAGATA	GAGGTAAGTA	CGAAGACCAC	AAAGCAGGTT	AAAAAGTAAG	GTGGGAAAGG	120
GATGCTATTT	TAGACAAGGT	GGTCAGGGCA	AGCCTCTCAG	AAGAGGGGAT	AAGTGCTCAG	180
AGACCTGACT	GAAGTGAGAG	TGAGCTATTG	ACACGGAGAA	GGGCATTTC	GACTCTGAAG	240
AGAAAGCAGG	GGCAGGCTTT	GGAGGGAGAG	CTTGTTTATG	TAGACAAGGA	GGGGCAAAGA	300
GTCTTGTTGA	TAAAGCAGAA	TGAACAAGAG	TAAATGGGAT	TGTAAATGAA	ATGACTCGAG	360

(2) INFORMATION FOR SEQ ID NO:760:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 192 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

GGACATATGC	AGTCAAAAGT	AGGTGCCCCAT	ATATATAATG	AAATACCAAA	AGGACAATTT	60
AGAAGGTTGA	ATGGAAACAT	TATGGCATGC	TTTAGACGTT	CTGTTTGGT	TTTCTTATTC	120
CCAGTCTTTG	ATCTTTTAGG	TCTATCCATT	GGTAAAGATA	TATTAGGACT	CACATCAACT	180
CAAGGTCTCG	AG					192

(2) INFORMATION FOR SEQ ID NO:761:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 326 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

GAATTCGGCC	TTCATGGCCT	AGTTTATTGC	TCCCAACTAT	ACATCTTCAG	ACTTCACTTA	60
GCATGTTACG	GGTGGTTAGG	TTCCAGGATT	ATTGAGATCT	ATTTCTACTC	ACAATTGCTT	120
ATAAAATGAA	ATCTATCGTC	ACCTTAATTG	CCTGTGCCTA	AAAATATAGC	ATGCTTGTCT	180
TGTGGGAAAT	ATTGAGCCTG	GTATGTGAGT	GACTGAAATG	CAACTCCGTG	GAAACACCCC	240
AACTCCACAC	ATTCATCCCC	TTGGTAATC	AGCACAGTCA	CAGAACTGA	AGAAGTAAAA	300
TGATCCTCTT	TATTTGGCTT	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:762:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

GAATTCGGCC	TTCATGGCCT	ACTGGCCCAA	GTGAACTTT	TAACAGGCTT	TTTGGAGATC	60
TCTTTAGCTA	GATCCAAAA	TTTCATCAGG	ATATTTTCTG	TTTCCAAGT	TCATGCAGGC	120
AATAGCTTTG	CTAATATATA	ATACTAGTTG	CCTTGTTC	GCTGCCATAT	CAGTTTCATC	180
ACTCCTTTCC	CAGTGCCAC	TCGAG				205

(2) INFORMATION FOR SEQ ID NO:763:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

```

GAATTCGGCC TTCATGGCCT AAAAATGAAT ATATTCCTAT CCTATATTAA GACACTTTCC      60
CTAACCTAAA AGTTTATTCT GTTTTTAAAA TAAATGAAAG TATTTGTATG GGCCCTGGGC      120
CTGACGGAGA TATGCCCTGC CCCCTCTCTA GAGTGCTGGG AATTCTCAGG TGACCCAGTC      180
CCACAGGCAG CCAAGTGCCC ACACATTTC AGGCTGCCCT CCACCAGGGC AGCGACCTCG      240
GGTCACCAGG GACACGCACA CCTAGAAAGC CGTGGGCTCC TCGAG                        285

```

(2) INFORMATION FOR SEQ ID NO:764:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

```

AATTCTTTAT CATTTCAGAT ATTAAGGATT TCAGATTTTA AGAGTTATCA GTGAAACTGT      60
GTTACAAGAA TATTTGTTC CTGAGACATC TCAGTATTAT AGGTGGCTTC AGACTAACAG      120
GCACAGAATA GGATAGTGTG AAGTATCTGA TTAGCTTTAC TGTACTTGGT ACCTTTAGGA      180
CGTTCAGCCA GAGGTGATTG GAGGGATTG CACGTCTACC ACTCGTGTGT GTATCTGTGA      240
ACCATATCTC CTTTAGTGCC TGCTTTTGAA CTTTATATAA ACAGAATGAT GCTGCCTGTT      300
TATCTCTATA ATTTCTTCT TCCCTTAGC ACGTGCTCAC TCGAG                        345

```

(2) INFORMATION FOR SEQ ID NO:765:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 100 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

```

GAATTCGGCC TTCATGGCCT AGAGAATGTT TTCATGTTAC TTATACTAAC ATTAGTTCTT      60
CTATAGGGTG ATAGATTGGT CCAATTGGGT GTATCTCGAG                        100

```

(2) INFORMATION FOR SEQ ID NO:766:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 333 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

GGATTGAATT	CTAGACCCTG	CCTCGTCATT	GTGGAACCCA	TGGAGCAGTT	TGATGATGAA	60
GATGGCTTGC	CAGAGAAGCT	GATGCAGAAA	ACTCAACAAT	ATCATAAGGA	AAGAGAACAA	120
CCACCACGTT	TTGCTCAACC	TGGGACATTT	GAATTTGAGT	ATGCATCTCG	ATGGAAGGCT	180
CTTGATGAAA	TGGAAAAGCA	GCAGCGTGAG	CAGGTTGATA	GAAACATCAG	AGAAGCCAAA	240
GAGAACTGG	AGGCAGAAAT	GGAAGCAGCT	AGGCATGAAC	ACCAATTAAT	GCTAATGAGG	300
CAAGATCTAA	TGAGGCGTCA	AGAAGAACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

GAATTCGGCC	TTCATGGCCT	AGATAATATT	TTATGTTTAT	TGTGTGTTAG	ACTGTGTTGA	60
AGTGGAAACT	TTGGAACATT	GTTGGAACCA	GTAAGAATCC	CATTCTCAG	GTATCAGGTC	120
GTTAAAGTAG	TTTAAATATA	CGTATTCCTT	AATTTTCCTC	AGCAGGTTCC	CCCTCCCTTT	180
AACCTGTGTG	TATAAATATA	TGTGTGTGAT	GTTTTCTCTT	ACAAAGATAG	TACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

GAATTCGGCC	TTCATGGCCT	AGGGATCCCA	CCTTTTACAT	CCTAGGTGTG	AACAGATTCA	60
AATCCACTAT	TCCTCCAGAT	TTTATAGATG	AGGAAACCAA	GGTGACAAG	AGGGATTTTT	120
TTGTTTGTG	TTTGTGTTTT	GTTGTGTTTT	GAGACAGGAT	TTTGCTTTGT	TGCCAGGCT	180
GGAATGCAGT	GGCACAAACA	TGGCTCGCTG	CAGTCTCGAA	CTCCTACGCT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

GAATTCGGCC	TTCATGGCCT	ACGGAATGAG	AAGATGAAAA	ATCAAATTAA	GCAGATGATG	60
------------	------------	------------	------------	------------	------------	----

```

GATGTCTCTC GGACACAGAC TGCAATATCG GTAGTTGAAG AGGATCTAAA GCTTTTACAG      120
CTTAAGCTAA GAGCCTCCGT GTCCACTAAA TGTAACCTGG AAGACCAGGT AAAGAAATTG      180
GAAGATGACC GCAACTCACT ACAAGCTGCC AAAGCTGGAC TGGAAAGATGA ATGCAAAACC      240
TTGAGGCAGA AAGTGGAGAT TCTGAATGAG CTCTATCAGC AGAATCTCGA G              291

```

(2) INFORMATION FOR SEQ ID NO:770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

```

CGCTGCGTGC TTGTGAGACT GCCTGTTCTG GGACCAGCCC CTGGGCTCTT CCACCAAGAT      60
TTGGTGAGAG TCCCCCTCTG CCTCTCACAG AAGCCCCTGG CCCTGGACTG TCCTGGGGGC      120
AGGGACACCT GTGGCTGGGG AAGGGATGGC CAACAGCGGG AAGCAGTTTG CGCCTGGTGC      180
CTGATGAAGG TGAACCACGA GACAGATGGA GACGGGAGTC AGGGGACCCT GGGGACCCTT      240
CCAGGTCCAG TGACCTTTTC CCAGACAGGC ACTCTCCAGG CCTAGGACAG ACAGGGCCCC      300
AACTCCTCAT CACCCCATGA CTGGCCTGG AGGAACCTGG GGTGGGAAAC AAGTAGTCCC      360
CCAACCTCAG AGGCCAGAAC CACAGGTGGG GGACAGGGAC CTCGACAGAG CTGTGCCTGC      420
TCAACGCTCG AG                                     432

```

(2) INFORMATION FOR SEQ ID NO:771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

```

GGTGTGGCTT TGCCCCGTAC GAGCGGCGCG CCATGGAGTT ACTGAAGGTC TCCAAGGACA      60
AACGGGCCCCT CAAATTTATC AAGAAAAGGG TGGGGACGCA CATCCGCGCC AAGAGGAAGC      120
GGGAGGAGCT GAGCAACGTA CTGGCCGCCA TGAGGAAAGC TGCTGCCAAG AAAGACTGAG      180
CCCCTCCCCT GCCCTCTCCC TGAAATAAAG AACAGCTTGA CAGAAGCCCT GGCTCTCCTG      240
CTGTCCGTGG GTGGGTGTGG GTGTGTCGGG GGCCCGCAGT CCCCTGTCTG GTGCCCCGTC      300
TGAGCCACAC CCTCTCCGGG TGCTGCCTGG TCGTGAATCA AAAGCCGTGG CCCGCCACCC      360
CTTCCCGGGG CAGCAGGTGA GGAAGCCGCT GTACTCGAG                                     399

```

(2) INFORMATION FOR SEQ ID NO:772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

```

GAATTGCGCC TTCATGGCCT ACAAGAAAAA AGAAAAGAAA TCATTAACCC CAGCTGTGCC      60

```

```

AGTTGAATCT AAACCGGATA AACCATCGGG AAAGTCAGGC ATGGATGCTG CTTTGGATGA 120
CTTAATAGAT ACTTTAGGAG GACCTGAAGA AACTGAAGAA GAAAATACAA CGTATACTGG 180
ACCAGAAGTT TCAGATCCAA TGAGTTCCAC CTACATAGAG GAATTGGGTA AAAGAGAAGT 240
CACAAATTCCT CCAAAATATA GGGAACTATT GGCTAAAAAG GAAGGGATCA CAGGGCCTCC 300
TGCAGACTCT TCGAAACCCA TAGGGCCAGA TGATGCTATA GACGCCTTGT CATCTGACTT 360
CACCTGTGGG TCGCCTACAG CTGCTGGAAA GAAAAGTAA AAAGAGGAAT CTACAGAAGT 420
TTTAAAGCT CAGTCAGCAG GGACAGTCAG AAGTGGTGCT CCACCCCAAG AGAAGAAAAG 480
AAAGGTGGAG AAGGATACAA TGAGTGATCA AGCACTCGAG 520

```

(2) INFORMATION FOR SEQ ID NO:773:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 129 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

```

GAATTCGGCC AAAGAGGCCT AGTTTATTGT TTGCATATAT TTTATAGTGT AGAGATTAGG 60
CATTTTAATA AAATTTTAAA ATTTCCAGGA TCTTACAGAA TGCTTTTATG TTACAGCTTA 120
CTCCTCGAG 129

```

(2) INFORMATION FOR SEQ ID NO:774:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 337 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

```

GAATTCGGCC TTCATGGCCT ACACAACGGA AAGCTGTTTT TCTGATCGAG GCTCTCTGAA 60
GAGCATAATG CAGTCCAACA CATTAAACCA AGATGAGGAT GTGCAGCGGG ACCTGGAGCA 120
CAGCCTGCAG ATGGAAGCTT ACGAGAGGAG GATTCGGAGG CTGGAACAGG AGAAGCTGGA 180
GCTGAGCAGG AAGCTGCAAG AGTCCACCCA GACCGTGAGG TCCCTCCACG GCTCATCTCG 240
GGCCCTCAGC AATTCAAACC GAGATAAAGA AATCAAAAAG CTAATGAAG AAATCGAACG 300
CTTGAAGAAT AAAATAGCAG ATTCAAACAG GCTCGAG 337

```

(2) INFORMATION FOR SEQ ID NO:775:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

```

GAATTCGGCC AAAGAGGCCT AGTGAGCGCG ACCATCATGT CCATGCTCGT GGTCTTTCTC 60
TTGCTGTGGG GTGTCACCTG GGGCCAGTG ACAGAAGCAG CCATATTTTA TGAGACGCAG 120
CCCAGCCTGT GGGCAGAGTC CGAATCACTG CTGAAACCCT TGGCCAATGT GACGCTGACG 180

```

TGCCAGGCCC GCCTGGAGAC TCCAGACTTC CAGCTGTTCA AGAATGGGGT GGCCCAGGAG 240
CCTGTGCACC TTGACTCACC TGCCATCAAG CACCAG 276

(2) INFORMATION FOR SEQ ID NO:776:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 586 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

GAATTCGGCC AAAGAGGCCT ATGAAATAGA AGAAGGTAAA AATAAGGAAC AAGCAATAAA 60
 CAGTTCAGAG AACATAATGG ACATCAATGA GGAACCAGGA ACAACTGAAG GTGAAGAAAT 120
 CACTGAGTCA AGTAGCACTG AAGAAATGGA GGTCAGAAGT GTGGTGGCTG ATACTGACCA 180
 AAAGGCTTTA GGAAGTGAAG TTCAGGATGC TTCTAAAGTC ACTACTCAGA TAGATAAAGA 240
 GAAAAAGAA ATTCCAGTGT CAATTAAGAA AGAGCCTGAA GTTACTGTAG TTTCACAGCC 300
 CACTGAACCT CAGCCTGTTT TAATACCCAG TATTAATATC AACTCTGA A GTGGAGAAAA 360
 TAAAGAAGAA ATAGGTTCTT TATCAAAAC TGAAACTATT CTGCCACCAG AATCTGAGAA 420
 TCCAAAGGAA AATGATAATG ATTCAGGCAC TGGTTCCTCT GCTGATACTA GCAGTATTGA 480
 CTTGAATTTA TCCATCTCTA GCTTTCTAAG TAAACTAAA GACAGTGGAT CGATATCTTT 540
 ACAAGAAACA AGAAGACAAA AGAAACATT GAAGAAACA CTCGAG 586

(2) INFORMATION FOR SEQ ID NO:777:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 463 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

GAATTCGGCC TTCATGGCCT AGTTTATATA GAGTAGGTTT ACATAGAAAA GGAAAGTTCA 60
 CTGAGATTTT TAGGTACAAG ATCTANCAAC ATGCACAAAC CAATATTGTT TATGTATAAC 120
 AGCTTCAAAC AATTAGAAAT TGTAATAACC ATTATGAAAG TGATGAAAT TGTATTGCTT 180
 AGTATTCTAC CAAAATTATT AAGTAATTTT TTTTTTTTTT TTTNANACGG AGTCCCGCCT 240
 GGGCCACAAG NGCNAAAATT TGTTTCNAAA AAAAAAAGA AAAGAAAGAA AAAAAATTGA 300
 ACTCTCAATC CCTAGATGTA AAATCAACCT CGTGTTCCTG ATTTACCAG TAATTCATAA 360
 CCACAACGTG TGTGTCTTGA ACACTTACTA TGCTTGGCAT ACTTATAATT TTTATTTTAC 420
 TTTATCTCA AATTTAAGAT GAAGTTTCTC CTACTAATC GAG 463

(2) INFORMATION FOR SEQ ID NO:778:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 466 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

GAATTCGGCC	TTCATGGCCT	AGCTGGGAGT	TACCTGNTAT	CCTGATGGTG	CCATGTGCTA	60
GCTGGGTGAC	AATAACCCAG	CCACCTAACA	TCTCAAAGAT	TGTTCCCTTT	TGTGTGAAAT	120
AGGGATAGAG	TTGTCTACTT	CCCAGAGCCA	GATAGAGAAC	TTAAGAGATG	AATCTGAAAA	180
TACAATAGCC	TAAATAAATT	CAAGGAAACA	CTATTATCTT	ACTGGATCTT	TCCAGCAACC	240
ATGTTACTTT	TGGCTGGATT	TTGTATTTTC	CAATTTGTGA	ATGACACAAC	AAAGAGCTAG	300
GTAGGTTAAG	TAAATGGTTT	CAGATAATAA	GCCCAGTTAG	CCCAGACGTT	TATTTTCCAT	360
TTGCATAGAA	AATGAATGTT	TTATGCATAC	ATTTGTTTGC	CCAGGGCTAG	GATATTACTT	420
GCATATGATG	TTCTTATATA	ATTAAAAAAA	AGAATACAAC	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:779:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

GAATTCGGCC	TTCATGGCCT	AATTCACAG	GGAAATGGGC	AGACTGAACC	AGTCCAGGTG	60
GTGAATTTTC	CAAGAACATA	GTTTAAGTTG	ATTAATAATG	CTTTTAGAAT	GCAGGAGCCT	120
ACTTCTAGCT	GTATTTTTTG	TATGCTTAAA	TAAAAATAAA	AATTCATAAC	CAAAGAGAAT	180
CCCACATTAG	CTTGTTAGTA	ATGCTCTGAC	CAAGCCGAGA	TGCCCATCTT	CTTAGTGATG	240
GCGGCGTTAG	GGTTTGAGAG	AAGGGAATTT	GGCTCAACTT	CAGTTGAGAG	GGTGCACTCC	300
AGACAGCTTG	ACTGCTTTTA	AATGACCAAA	GATGACCTGT	GGTAAGCAAC	CTGGGCATCT	360
TAGGAAGCAG	TCCCTGGAGA	AGGCATGTTT	CCAGAAAGGT	CTCTGGAGGG	ACAAACTCAC	420
TCAGTAAAC	ATAATGTATC	ATGAAGAAAA	CTGATTCTCT	ATGACATGAA	ATGAAAATTT	480
TAATGCATTG	TTATAATTAC	TAATGTACGC	AGACTCGAG			519

(2) INFORMATION FOR SEQ ID NO:780:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

GAATTCGGCC	TTCATGGCCT	ACTAGACCCC	CGCCACAGCA	GCCTCTGAAG	TTGGACAGCA	60
AAACCATTGC	TCTACTACCC	ATCGGTGTCC	ATTTATAGAA	TAATGTGGGA	AGAAACAAAC	120
CCGTTTATG	ATTACTCAT	TATCGCCTTT	TGACAGCTGT	GCTGTAACAC	AAGTAGATGC	180
CTGAACTTGA	ATTAATCCAC	ACATCAGTAA	TGTATTCTAT	CTCTCTTTAC	ATTTTGGTCT	240
CTATACTACA	TTATTAATGG	GTTTTGTGTA	CTGTAAAGAA	TTAGCTGTA	TCAAACCTAGT	300
GCATGAATAG	ATTCTCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

GAATTCGGCC	TTCATGGCCT	AAATGGGAAT	CATCATTGCA	TAACAAACCT	AAAGAGAAAA	60
TGAGAACATT	TACGAAGAAG	AAACAGAGTT	ACTGTACCAA	GGGCAAAAAG	AAAAGAAGGG	120
GGAAAAAATA	TAACTCCATA	AAAGAAAAAC	AAAGGAATC	CATGAGCCTG	GACGACAAGC	180
CGTGGGGGAT	GTAAGAAGGT	TTGGAACCCA	AAAGGCAAGT	CTAATCAGCT	GGGGTAACAT	240
GGCGAGGCAG	TTCCACATGC	TGAGACTTGT	GGCTACCACA	TTAAAAAAGA	CTGTGCATAT	300
TCTAAATGAC	AGCAGTCCTG	CAGTGACGTG	GATATTCACT	CTAGAAGCTA	TGCAGGCAGG	360
CGTGGGAAAA	GCGAAGAGAT	GTTGCACCAT	GCAGCTGCAA	TCTTTATGTC	TCTACTGGCA	420
CAACCGAAAA	GAGTAATGTG	GAAATTATCC	AGAGAATTTA	GGTGAGAAAA	ACAGAAGCCA	480
TCAGATTTC	TCCTTTAAAT	CTTCAGAGGG	GTATACACTC	CCCTGGAAAA	CCAAGTTGCC	540
TCTCTGCTCA	CATCCTCGAG					560

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

GAATTCGGCC	TTCATGGCCT	AGGGGAGTCC	TCATTCTGAC	CTCAAAGAAA	GGACTGTATT	60
GTCTGGCTCC	ATAATGCAGG	GGACACCAAG	AGCAACAAC	GAAAGCTTTG	AAGATGGCCT	120
TAAATATCCC	AAACAAATTA	AAAGGGAAA	TCCTCCCAT	CGAGCATTG	AAGGTGCCAT	180
TACCAAAGGA	AAACCATATG	ATGGCATCAC	CACCATCAAA	GAAATGGGGC	GTTCCATTCA	240
TGAGATTCCA	AGGCAAGATA	TTTAACTCA	GGAAAGTCGG	AAAACCTCC	AAGTGGTCCA	300
GAGCACACGG	CCGATAATTG	AGGGTTCCAT	TTCCCAGGGC	ACACCAATAA	AGTTTGACAA	360
CAACTCAGGT	CAATCTGCCA	TCAAACACAA	TGTCAAATCC	TTAATCACGG	GGCCTAGCAA	420
ACTATCCCGT	GGAATGCCTC	CGCTGGAAAT	TGTGCCAGAG	AACATAAAA	TGGTAGAACG	480
GGGAAAATAT	GAGGATGTGA	AAGCAGGCCA	GACCGTGCGT	TCCCAGGCAC	CGTCAGTGGT	540
AAGCTCTGGC	CCCTCCGTTT	TTAGGTCCAC	ACTGCATGAA	GCTCCCAAAG	CACAACTGAG	600
CCCTGGGATT	TATGATGACA	CCAGTGTCTC	GAG			633

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

AAATGACACT	GAATGACACG	TTAGCCAAAA	CTAACAGAGA	ATTATTAGAT	GTGAAGAAAA	60
AATTTGAAGA	TATAAATCAG	GAATTTGTAA	AAATAAAAAG	TAAGAATGAA	ATATTAAAAA	120
GAAACCTGGA	AAACACTCAG	AACCAAATAA	AAGCTGAGTA	CATCAGCCTG	GCAGAGCACG	180
AGGCAAAGAT	GAGCTCGCTA	AGTCAGAGCA	TGAGAAAGGT	GCAGGATAGT	AATGCTGAAA	240
TCTTGGCCAA	CTACAGAAAA	GGCCAAGAAG	AGATTGTGAC	ACTGCATGCC	GAAATTAAAG	300
CCCAGAAGAA	GGAGCTCGAC	ACAATACAAG	AATGCATTAA	GGTAAATAT	GCCCCAATTG	360
TCAGCTTTGA	GGAGTGCAG	AGAAAATTTA	AAGCAACAGA	GCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:784:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 342 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

```
GCAGAAAAGT CAGAACAATT TGAGGAGCTT CAAAGCATCC TTAAGAAAGG GAACTAACT      60
TTTGAGAATA TTATGGAAAA ACTGCCAATC AAGTATTCCG AAATGTACAC CATAGTCCCT      120
GCAGAGATTG AATCCCAGGT GGAAGAATGC AGAAAAGCTT TAGAAGACAT AGATGAGAAG      180
ATTAGCAATG AAGTCTTAAA AAGCTCACCA TCATATGCAA TGAGGAGAAA AATAGAAGAA      240
ATTAACAATG GGCTTCATAA TGTTGAAAAG ATGTTGCAGC AGAAAAGCAA AAATATTGAG      300
AAAGCTCAAG AAATTCAAAA GAAATGTGG GACTCACTCG AG                                342
```

(2) INFORMATION FOR SEQ ID NO:785:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 456 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

```
GAGATAATGG ATGAAAGGAT TCAGAGGAAA GTAGAGAAAC TAGAGCAACA ATGTCAGAAA      60
GAAGCCAAGG AATTTGCCAA GAAGGTACAA GAGCTGCAGA AAAGCAATCA GGTGCTCTTC      120
CAACATTTCC AAGAACTAGA TGAGCACATT AGCTATGTAG CAACTAAAGT CTGTACCTT      180
GGAGACCAGT TAGAGGGGGT AAACACACCC AGACAACGGG CAGTGGAGGC TCAGAAATTG      240
ATGAAATACT TTAATGAGTT TCTAGATGGA GAATTGAAAT CTGATGTTT AACAAATTCT      300
GAAAAGATAA AGGAAGCAGC AGACATCATT CAGAAGTTGC ACCTAATTGC CCAAGAGTTA      360
CCTTTTGATA GATTTTCAGA AGTTAAATCC AAAATTGCAA GTAAATACCA TGATTAGAA      420
TGCCAGCNGA TTCAGGAGTA TACCACTGCT CTCGAG                                456
```

(2) INFORMATION FOR SEQ ID NO:786:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 488 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

```
GAATTCGGCC TTCATGGCCT AGGGGTGAGA GTGTAGACGG CTTTCCAGT TGTATCCAAG      60
GCAGTCAGAC AGGGGGATT TTTGGCTGTGTT GTGCCCCAGC GCTGCAAGGT GGCCAACAGC      120
GACGGCGGTC GGGGGACACC TGCAAGTACA GGCTCCCTC TCAGCACACT CGTCTCGCTT      180
CCCTCAGGCT TTGGCTGATT TGGATCTGGT TGCTGAACTT CCAACAATTC CTCAAAATCA      240
TCCACAAAGA ACTCCTTCAG TGGAGGGCGC TTTGGCTCTC TCAGGGTGTT CAGAAGCTGC      300
TGGATTTTGG AGGACACTCT GCTGTTTACA GGGACACCAT CTGCTGTTTC CAGCATGCTC      360
CCGCTGCACC CCCGAGGAAC ACTTCTCACA GAAGCCACCT GTGGACGCTC AAAGTACGAA      420
TGCTCCACGA GGCCCGTGGT GACATCAGGA GGGGCAGAAT GCAGATCTAT GTGGGTGTGG      480
GCCTCGAG                                488
```


(2) INFORMATION FOR SEQ ID NO:787:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

```

GAATTCGCCT TCATGGCCTA AGTGTCCGGA ACATATGTCA TGATTCTATG TCCAAACAAC      60
AGGCCAACCC TCAGGACAGA CCCC GCCACC CCCCTTCTCT GCAGCTCCTG GCAGGGACGG      120
TGCACAGTGG TGCCGTGTGC AGGGGGCCAG CGCAGCCACT GGGCATCTGG GGCAGCGCTG      180
GTCGCCTGGC CACCTCCTTG CTGGGGCCGC TGGGCCTCCG GCCTAGAAAG ACAGGAAGCC      240
ATCCACCTCA AGGCGCAGGA AGGGGTCCAG CAGGGCCCCG AGCTTCCAGA TGGTGGCAGC      300
GCTCAGCAGG GCGGCGACCA GCCCCTCGAA GGGCCTGGGG TTCACCATGT ACACGTAGGC      360
GACCAGCAGG GTGCCCAGCA GCAGCCTCAG GATCAGCAGC CTGAGAATCT CCAGCTGGAT      420
CTCTCCATC TGGTCCCTAG ACCTGCCTCG AG                                     452

```

(2) INFORMATION FOR SEQ ID NO:788:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

```

GAATTCGGCC TTCATGGCCT ACAGGACAGA GGCAAATAGT AGACAAAGGT GAAGCCAAAG      60
GCATAATTAA GGAAGGAAGA ACGATATTAC CAAAAGATGA AACTGAAAAG AAAGTCTTAA      120
CTGTGTCAAA TTCTCAAATT GAAACTGAAA TTGAAGTTCC ATCGTCCGCA GTTCCAGAAC      180
ACAGAATGTA TGAAATCAA AGTCAGGTGG TTCTTGTAGA AAACCTTCAT GTTAACAAAA      240
CAAATGAAAC AATCAGACAT GAAATAAAC CGTATGTTCC TAGTTCAGCA CAAATGACAA      300
GAAGGAAATT CAAAAGGCT AAGCCAAATT TGGGAAGAGC ACACAGTAAG AAAGAGGAAC      360
CAGTTTTAGA AAAAGTCACA AACTCGAG                                     388

```

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

```

GCCTGAAGAC ATCAAAAAGG AGGCAGCCCG GGCTTCTAGG AAGATCTGCT TTGTGTGCAA      60
GAAAAAGGGA GCTGCTATCA ACTGCCAGAA GGATCAGTGC CTCAGAAACT TCCATCTGCC      120
TTGTGGCCAA GAAAGGGGTT GCCTTTCACA ATTTTTTGA GAGTACAAAT CATTTTGTGA      180
CAAAATCGC CCAACACAGA ACAATCAACA TGGGCATGTG GGGGAGGAAA GCTGCATCTT      240
ATGTTGTGAA GACTTATCCC AACAGAGTGT TGAGAACATC CAGAGCCCGT GTTGTAGTCA      300
AGCCATCTAC CACCGCAAGT GCATACAGAA ATATGCCAC ACATCAGCAA AGCATTTCTT      360

```

CAAATGTCCA CAGTGTAACA ATCGAAAAGA GTTTCCTCAA GAAATGCTGA GAATGGGAAT 420
TCATATTCCA GACAGAGATG CTGCCTGGGA ACTCGAG 457

(2) INFORMATION FOR SEQ ID NO:790:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 582 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGCGGCAGCG GCTCTTCAAA GCGGAGCCGG GAGTTTTTGC 60
TACAGTTTTC GCCACCATGA GTCGCAGCTA TAATGATGAG CTGCAGTTCT TGGAGAAGAT 120
CAATAAAAAC TGCTGGAGGA TCAAGAAGGG CTTCGTGCCC AACATGCAGG TTGAAGGTGT 180
TTTCTATGTG AATGATGCTC TGGAGAAATT GATGTTTGAG GAATTAAGGA ATGCCTGTCTG 240
AGGTGGTGGT GTTGGTGGCT TCTGCCAGC CATGAAACAG ATTGGCAATG TGGCAGCCCT 300
GCCTGGAATT GTTCATCGAT TATTGGGCT TCCTGATGTC CATTACAGGAT ATGGGTTTGC 360
TATTGGGAAC ATGGCAGCCT TTGATATGAA TGACCCTGAA GCAGTAGTAT CCCCAGGTGG 420
TGTCGGGTTT GACATCAACT GTGGTGTCCG CTGCTAAGA ACCAATTTAG ATGAAAGTGA 480
TGTCAGCCT GTGAAGGAGC AACTTGCCA AGCTATGTTT GACCACATTC CTGTTGGGGT 540
GGGGTCAAAA GGTGTCATCC CAATGAATGA CAAAGACTCG AG 582

(2) INFORMATION FOR SEQ ID NO:791:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 468 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAATTCGGCC TTCATGGCCT ACATTTTCTG AGAAAGGTTT GGATGACTGA AATATTTCTT 60
CTACAGTCAA GGACTTTGGC ATGTGGTGGC TGAAACTGAG CTTTTTTGTG TGGGCTCCAG 120
TTCTCACTGT TCTGCAATGC TCATGGCAAG TTGAATGGTG AGCTAGCTTA TAAATTAAG 180
AGCTCTGAAC TGTATTCAGA CCGACTGGGT ATCTAGCTTA CTGTTTTAAC ATCATTGTTG 240
AAACCAGACC CTGTAGTCCA GTGGTGTGTC CCTGTTGTGC AAACGTCTCC TTTTCTCGT 300
GTTTTTGTA AGAGCTTCCA TCTGGGCTGG ACCCAGTTCT TGCACATACA AGACACCGCT 360
GCAGTCAGCT AGGACCTTTC CGCCATGTAT TCTATTCTGT AGTAAAGCAT TTCCATCAAC 420
AATGCCTAAT TGTATCTGTT ATTTTGGTT TAACACACAC TGCTCGAG 468

(2) INFORMATION FOR SEQ ID NO:792:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 519 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

GAATTCGGCC	TTCATGGCCT	ACGTGGCTAT	AACTGGAAAA	CTGGATCCGA	AATCGACCAG	60
TAAACTGGGT	AGCTCGGTCT	ACGCCCCGCC	CACCACCTT	GCTAGCCAAT	AGCCTTCACA	120
ACTCTTCTGC	CACTCCCGCC	CATTCCAGTG	CTGTGCGGCT	GCTTTTCTT	CCACTCGGAT	180
CTCTTGAGCG	CCCTTAGCCC	GCTGTATACG	CGCCCCCTCT	CGGCTTCAGT	AGGCAAGAGG	240
GCCATCTGCC	CTTCCTTCCT	GAAGGTAGAG	GGGACAACAC	CAGCTACGAC	GGGGACTCCA	300
GAAGTCCATC	TCCCGAACAG	CAGCGGGGCG	AAAAGAAAGA	AAAAGGGTTT	CCGAAGACTC	360
CTACTCACAC	CCACGCTTTC	CCTTAACCCG	GAAGTGATTT	CCGCCCCCTC	TCTCCCTCTT	420
CGGTTGATAC	TGGAGGAGAA	GGACGGCCAG	GTCTGGCCCC	GCATGCCCTG	GGCTTCCGGT	480
GACCTCTGGC	CCTTTTCTGT	CCTCCACTCT	CCGCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

GAATTCGGCC	AAAGAGGCCT	ACAGAAACAT	CCAATTCTCA	AACTGAAGCT	CGCACTCTCG	60
CCTCCAGCAT	GAAAGTCTCT	GCCGCCCTTC	TGTGCTTGCT	GCTCATAGCA	GCCACCTTCA	120
TTCCCCCAAGG	GCTCGCTCAG	CCAGATGCAA	TAAATGCCCC	AGTCACCTGC	TGCTATAACT	180
TCACCAATAG	GAAGATCTCA	GTGCAGAGGC	TGCGGAGCTA	TAGAAGAATC	ACCAGCAGCA	240
AGTGTCCCAA	AGAAGCTGTG	ATCTTCAAGA	CCATTGTGGC	CAAGGAGATC	TGTGCTGACC	300
CCAAGCAGAA	GTGGGTTTCA	GATTCCATGA	ACCTCGAG			338

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

GAATTCGGCC	AAAGAGGCCT	ACCAGGATGG	TCTCAATCTC	CTGACCTCAT	GATCTGCCTG	60
CCTCGGCCTC	CCAAAGTGCT	GGGATTACAG	GCGTGAGCCA	CCGCACCCGG	CCCTAAACCC	120
TAGGTTTTGA	CTTCTGTAAG	AAGGAAAGAT	TAAACAAAC	AAACAAACAT	TAAATTACAA	180
CCATAATAAA	CAAAAAACA	CTAAACTAAA	TTACAACCAT	AATAAAATCT	CCCAAAGTCC	240
GTAGGCACTG	ACATATTACA	GCCTTGCCAA	ATCAGAATAG	ATTTCTCATG	TGTTGTCAAT	300
TTACCAGACA	CAAAGAGTAG	CTCAGATCTC	ATAGACTCTT	CAGATCTTGT	AGACTAATTT	360
CAAGTCTTTT	TAAAGTTTTG	AAAAACATGT	GCTATTTGGA	ATTACGTCA	CCTCGAATAT	420
TAAACCTGAG	CTCAAAAACC	TATTGTTTGA	TATTGGAAAT	AGTTAACTCC	AGTTTCTTTC	480
TATTAAGATA	AAATTCTTTC	ATCATGTCTG	TGCCCTCTAA	AATAATACTC	CTATTGCTTT	540
GTCTTCCCCT	TCTCCCCTCC	TAGTCCTTCT	TTAGTCATTC	TATTTAGAAT	CAAGTCGCTC	600
ATGAGTTTAA	GAATTAGAGC	AGCAAGAAAT	TGGGCTAGAG	ATGTACAAAA	GCTTTGGACA	660
ATAGTAGTTT	TGCTTGTCCT	CATTCTTATT	AGAAGTGCTG	TTAATTTACT	GATAAATTCT	720
AGGACGGAAG	ACAAATCTTT	GCAACTGGTA	CTCGAG			756

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

GAATTCGGCC	AAAGAGGCCT	ACCAGGAAGC	TCTCCTGCTT	GTCATGAAGT	GAGAACAATG	60
AAAAGTCATA	GCAGATACTC	AGTTTAACTC	TGTGTAGAAC	CTATTAGTGT	TTGAGCTGTT	120
ATTCAGATTT	GAATTCAGAC	TGTGTGTTGT	TTGCTTATGG	ACACTGCCTG	TCGTTCTGTC	180
ACTGTTAAAT	TAATGAGTCT	ATAAGGTTTT	TCTTCCAGAG	GCCATAGGTG	ACATCACTAA	240
AATTGCAAGA	TAAATTGTAA	TCTTTGNTGN	TGCTGCACTC	CCCAACCTCT	CCCCACCCC	300
CCGTGGTGTG	CTGCTTTCTA	GATGAGCGTG	TTTTGGAGCA	GGCCCATCTG	GGACACTCTA	360
TGCTTTCACC	AAGGAAGTGC	GATCTGAGCA	GCCACAATCC	AGCCAAAAGA	GGATCGTAGA	420
TATTTGCTCT	GATCAACTAG	ATGAAAATAT	AGCAGAATGG	ATTTAGCCCA	CTGCTCTGTT	480
TTATCCAACT	GAGTCTCTGA	CCAGCAATTG	GTGCATAATT	ATTACAGCAA	AAGTTAAGAA	540
ATGAAACTGT	AGCAATTATG	TAAATGAATG	TGTTGGCCTC	TTAATACCTG	TTACTAGTGG	600
ACTTCCTGTG	AGGAAGTTAG	TTTTTTGTTT	TGATGAAATG	CTCTCGAG		648

(2) INFORMATION FOR SEQ ID NO:796:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 610 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

GAATTCGGCC	AAAGAGGCCT	AAGAGGCTGG	CCCCAGTCCC	AAGGAACAAG	AGATGGTCAA	60
GTCGCTAGAG	ACATATCAGG	GGACATTAGG	ATTGGGGAAG	ACACTTGACT	GCTAGAATCA	120
GAGGTTGGAC	ACTATACATA	AGAACAGGCT	CACATGGGAG	GCTGGAGGTG	GGTACCCAGC	180
TGCTGTGGAA	CGGGTATGGA	CAGGTCATAA	ACCTAGAGTC	AGTGTCTCTG	TGGTCCTAGC	240
CCATTTTCAGC	ACCCTGCCAC	TTGGAGTGGG	CCCCTCCTAC	TCTTCTTAGC	GCCTACCCTC	300
ATACCTATCT	CCCTCCTCCC	ATCTCCTAGG	GGACTGGCGC	CAAATGGTCT	CTCCCTGCCA	360
ATTTTGGTAT	CTTCTCTGGC	CTCTCCAGTC	CTGCTTACTC	CTCTATTTTT	AAAGTGCCAA	420
ACAAATCCCC	TTCTCTTTTC	TCAAAGCACA	GTAATGTGGC	ACTGAGCCCT	ACCCAGCACC	480
TCAGTGAAGG	GGGCCTGCTT	GCTCTTTATT	TTGGTCCCGG	ATCCTGGGGT	GGGGCAGAAA	540
TATTTTCTGG	GCTGGGGTAG	GAGGAAGGTT	GTTGCAGCCA	TCTACTGCTG	CTGTACCCTA	600
GAAGCTCGAG						610

(2) INFORMATION FOR SEQ ID NO:797:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

GAATTCGGCC	AAAGAGGCCT	AGCCACTATC	CTGGTTACTT	GTGGATTAC	CAAGCAGTCC	60
AGCAAGTCAT	CCGTAGAAAT	GAATGTTTGA	GGAGTCGTAG	TAGTATTTGA	GGCAATCTGT	120
TCCTCAATTG	CATTTTCACT	GTTGCTCATT	ATTGTTGTG	TCTTGGCACA	ATGCAATTTT	180
CCAAAGTGTT	CTCCATCCTT	GTCCACAAAG	TCTTTCCCAT	CACCTCCAAA	TATGCCTCCT	240

CTTTCTGAAG GCGGTTCTTC GGACCTCTGT GCTACAGGGA CTCGAG

286

(2) INFORMATION FOR SEQ ID NO:798:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 163 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

GAATTCGGCC AAAGAGGCCT AGTTTTTTAT TGGTTTGGAG ACTAGAGCCA ATAGTATAAT	60
GTTCTCAAAG GAAACAGACT TGAGTTGTTG GATTAGAGGA ACTAACCCAA CTTATATGAT	120
TTTTTTTTTG TTTTGTCTG GTAGTTATGG CACTAGTCTC GAG	163

(2) INFORMATION FOR SEQ ID NO:799:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 443 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAATTCGGCC TTCATGGCCT AGAGGGAATG CGGAGAGGGG TGGAGAAATT CCATCTTTGT	60
TAGGGCAGCA GTCAAGGATG AGTGAGTTAG CCTCTTAAGG AAGAGGCTAA GCTGTTAGAA	120
TAAAGAGGTT TACAACATCA GCGGCTTAAA TCAAATAGAA GTGTGTTTCT CTTTCACATG	180
ACAGAGTAGA TGTGGCCTGG CATCTAGAAA GCATATTTGT CTCTGCTCCA CTGTGTCTTC	240
CAGGGACCCA TTCTTCTCTT GTCTTCATGC TCCATCACTT CCTAGGGTGT TGTCTACACC	300
TGCATAGCCA TAGCTAATTT TCCATTCTCA GCACCAACCA GGGGAAGAGG AGGAAAGGTA	360
GCCTCCTTTT CATGATAGGT GTGAAGTTAT GCAGGACACT CTCAGGGTGA ATGGACCACA	420
GTGTGGCTCC TCCTGGGCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:800:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GCATGTGCAG CGGCAAAGAG AACCCGGACA GTGATGCTGA CTTGGATGTG GATGGGGATG	60
ACACTCTGGA GTATGGGAAG CCACAATACA CAGAGGCTGA TGTCTATCCC TGCACAGGCG	120
AGGAGCCTGG TGAAGCCAAG GAGAGAGAGG CACTTCGGGG CGCAGTCCTA AATGGCGGCC	180
CTCCCAGCAC GCGCATCACA CCTGAGTTCT CTAAATGGGC CAGTGATGAG ATGCCATCCA	240
CCAGCAATGG TGAAAGCAGC AAGCAGGAGG CCATGCAGAA GACCTGCAAG AACGGTCGAC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:801:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

```

GAATTCGGCC AAAGAGGCCT AAACACTCAA ATTTTACATT TTGAGCAGTA TTTACGCCTG      60
AATTAATTCA CAAGTTTCAA GGCTACTAAC TTTGGTTATA TTATATTATT ATTTTCCAAT      120
TTAGCCACCT CTTTATTTGT ATAATAGAGC ATACAGCAGC ACATAAAACG CAAAACCTCTA      180
GGACATAAAA AGTGGCATTG GGACGATGTT GCTCTGAAAT TTATGCATTA ATTAAACCGG      240
TATATATGTA TGCATTAATT AAACCAATAT TTATGAAGTT CCTACTGTGT TACAGACGTG      300
GATCCAGGCA CTGAGGATGC AGCAGGCCAT CCAAATATAA AGTTACTTCC TTAGGAAGCT      360
TCCATTCTAA TGGGAGAGTG TTGTTAAAGA GATATATAAT AATATGTAA ATGAATCCAT      420
AATGGTGAGT ATTATGAAGA ATAAAATTGC CAGGTTTTCT CGAG                          464

```

(2) INFORMATION FOR SEQ ID NO:802:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

```

GAATTCGGCC AAAGAGGCCT AATCTTCTGC CTGTTCTGAA AAAGCTTTGC TTCTTGTGAT      60
TTGTATCAGC AGGGGGAAAG GTCCTTACTG TTTTCCAGA CCTACAGTTG TGATAGAGGC      120
TCCTCCCAGC CCCGCCACA GACCCCAACA GTGCCCTCTC TCACAAATGG ATTCTGGGGC      180
TTGGTCTTTA TTTTGTITT TGTGGGGGCG AGCATATGGA ACCCAAAAT AGTATCATAG      240
CCTAAATTTG GAGCTTTGTG CCAGCCTTGT CTGTAGGATG ACCCGTGTGG GTCTCACCTG      300
GTGACTGGGA GTCCACAGGG GTCAGTTAGT AGCAGGGAGC TGCAGGGCGC CTGTCAGCAG      360
AGACCGTCTC ATTCCCCAAA CCCAGGAGCC AGAGGAAC TGACGCCGGAT AAATGCCCAA      420
GCCGCCCCGG GTGGGATTAG TCGTCTACCT TCCAGAAAT ACACCCTCCC ATCCTGTGAC      480
TTGGATACAG TTTACTGATG AAATTAGGGA ACCTCCTGCG CCTTACCAAG AAGCTGTGGC      540
TGGAACTTAG TCAATGAAAA ATGATTGTGA AACTCTTTGG AGCTGGCTTT GAAAGAATGT      600
TTAAATGATG AGCTGATACT GCCAGACAAC AGAACAGGCC GGCCCTCGAG                          650

```

(2) INFORMATION FOR SEQ ID NO:803:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

```

GAATTCGGCC AAAGAGGCCT AAGAGAACAG GAGCATTACA GTAAATTCC TAAGTAGCCA      60
ACTGATTGTC AGTGCCAGAA ATGAATACCG ATCCAATCGA G                          101

```

(2) INFORMATION FOR SEQ ID NO:804:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 723 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

```

GAATTCGGCC AAAGAGGCCT AGCTCTCTGT ACCCAAGGAA AGTGCAGCTG AGACTCAGAC      60
AAGATTACAA TGAACCAACT CAGCTTCCTG CTGTTTCTCA TAGCGACCAC CAGAGGATGG      120
AGTACAGATG AGGCTAATAC TTACTTCAAG GAATGGACCT GTTCTTCGTC TCCATCTCTG      180
CCCAGAAGCT GCAAGGAAAT CAAAGACGAA TGTCCTAGTG CATTTGATGG CCTGTATTTT      240
CTCCGCACTG AGAATGGTGT TATCTACCAG ACCTTCTGTG ACATGACCTC TGGGGGTGGC      300
GGCTGGACCC TGGTGGCCAG CGTGCATGAG AATGACATGC GTGGGAAGTG CACGGTGGGC      360
GATCGCTGGT CCAGTCAGCA GGGCAGCAAA GCAGACTACC CAGAGGGGGA CGGCAACTGG      420
GCCAACTACA ACACCTTTGG ATCTGCAGAG GCGGCCACGA GCGATGACTA CAAGAACCCT      480
GGCTACTACG ACATCCAGGC CAAGGACCTG GGCATCTGGC ACGTGCCCAA TAAGTCCCCC      540
ATGCAGCACT GGAGAAACAG CTCCTGCTG AGGTACCGCA CGGACACTGG CTTCTCCAG      600
ACACTGGGAC ATAATCTGTT TGCATCTAC CAGAAATATC CAGTGAAATA TGGAGAAGGA      660
AAGTGTGGGA CTGACAACGG CCCGGTGATC CCTGTGGTCT ATGATTTTGG CGACATCCTC      720
GAG                                                                    723

```

(2) INFORMATION FOR SEQ ID NO:805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

```

GAATTCGGCC TTCATGGCCT ACGGCCAAAG AGGAGGAGAT GGCGCCAGTC AGGGAGCGGC      60
CGTGGCCCAG ACAGTGAGGA AGCGCAAGG CGGAGCAACC GAGGAATCCT CCGGAGAAGA      120
ATCAGAGCCG TCGCTACCGC CACTACCGCC ACCACCATGG AAGGAGCAAA GCCGACATTG      180
CAGCTCGTGT ACCAGGCAGT GCAGGCGCTT ACCACGACCC AGATCCCAGC GGAAAGGAGC      240
GCGCCTCTTT TTGGCTTGGG GAGCTGCAGC GTTCGGTTCA TGCTGGGAG ATCTCAGACC      300
AGTTGTTACA GATCCGGCAG GATGTGGAGT CATGCTATT TGTGTCACAG ACCATGAAAA      360
TGAAGATTCA GACCTCATTT TATGAGCTCC CCACAGTACT CTCGAG                      406

```

(2) INFORMATION FOR SEQ ID NO:806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

```

GAATTCGGCC TTCATGGCCT ACGCCCGGGT TGGAAAGTGT CAGTCAATGA GCTCCCGCTC      60
CTCCTGGATC CGTCTGTAGG TCTCCCCGGT GTGCATGAGC AGCTCACTCA CTGGCTTCTT      120
TAGGTGTTCT CTGAGGGCTT CCTGCTGCTT CTTCCGCAGG GCTGTGTAC GCTGCCAGTT      180

```

TTCAGAAAAG TTGTGCTGAG GAGGTGGGGC CCAGGGAGGT CTCTCTCTT CTTTTGGGGC	240
TTTTTGCTTT GACTCTCCTT CAGCAGAGAT GAGGGTCATC AGACAGGGTG AGGTAGGTAT	300
CCGCTCAGCC AGCTGGGTGT TCCCTCGAG	329

(2) INFORMATION FOR SEQ ID NO:807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

GAATTCGGCC TTCATGGCCT AAGGTACTTT AATCAGTCTA AATACTTGAA CATTTTTATT	60
TCAGTGGTAA AAAATAGACT GAGGCAGAGT GAAGTTATAA ATTAGAATCT AAAAATTTAC	120
CCTTCAACAT TAATATTTTT TAGTGCTCTA ATATAAAACA CAGAAAACCT ATCTCAAATA	180
TAAAAGATGA ATATAAAATT ATTAATTAAA CAACTGGCGC TCGAG	225

(2) INFORMATION FOR SEQ ID NO:808:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

GAATTCGGCC TTCATGGCCT AACTTGCTCT TCTGTTTCTA GTTTTATAAA GTGAAAGCTG	60
CAATCATTGA TTAGAGACAG TTCTACGCTA AAGTCATAAT GACATTTTAT GTAATTTCTT	120
TTTTCTTTTT TTGAGACAG AGTCTCGCTC TGTGCTCAG GCTGGAGTGC AGTGGAGTGA	180
TCTCAGCTCA CTGCAACCTC TGCCTCCCAG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC	240
GAGTAGCTGG GATTACAGGC CCCACCAAC TCGAG	275

(2) INFORMATION FOR SEQ ID NO:809:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTTA ATTTGAAGAT	60
ATTCTTCCTG GACTACTTGT TTATAGTTTA TTAAATGAAC TGCTCTATTT CTAAAACTT	120
TATTTTAAAA GTCCTTTCCC GTTTAGAATG CGGCATACTC TTGCTTGTGG GGTATATATC	180
TCTGATCGTG ATAACCTACCT ACCGAAAACC TTTCATGGCT CCTTGCCAAC TACAAAATTG	240
CGATATCCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:810:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 283 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

```
GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGC CGACGCGGGG AGAGACAAAA    60
AAGAGAAAGT CTTTGAAAAG CACAAGGAGA AGAAGGATAA AGAGTCCACA GAAAAGTACA    120
AGGACAGGAA GGACAGAGCC TCAGTGGACT CCACGCAAGA TAAGAAAAAT AAACAGAAGC    180
TCCCCGAGAA GGCTGAAAAG AAGCACGCTG CCGAAGACAA GGCTAAAAGC AAACACAAAG    240
AGAAGTCGGA CAAAGAACAT TCCAAGGAGA GGAAGTCCTC GAG                      283
```

(2) INFORMATION FOR SEQ ID NO:811:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

```
GAATTCGGCC AAAGAGGCCT AGGCTTCCAC CCAGGAAATG ATCCAGAGCC TCTTTTATGT    60
TATGTTTTTT GTTTGTTCTT TTCAAGACAA TCGATCAAGC CAGAGGCATT CCCCACCCTT    120
CAGCAAGACA CTTCCAGTA AGCCCAGCTG GCCTTCAGAG AAAGCAAGGC TCACCTCCAC    180
CCTGCCGGCC CTGACTGCTT TGCAGAAACC TCAAGTCCCA CCCAAACCCA AAGGCCTCCT    240
TGAGGATGAG GCTGATTATG TGGTCCCCGT GGAAGATAAT GATGAAACT ATATTTCATCC    300
CACAGAAAAG CTCGAG                      316
```

(2) INFORMATION FOR SEQ ID NO:812:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

```
GGGATGCATA GATTTAGTTC TGCCTCACAG GCAGGTAGCC TGAGCTCCTA GGGGGAAGT    60
TTTTTGCTAA GTAGGGAATG AAAAGCATGT TATTTAAGC ACAAAATTAA ATCTCTCCTA    120
TTTTTATATG ATTTCCCGTT GTTTTCTTCC CTGTAGGGAA ATCTGCTGTG ATAGAGAACT    180
GCGTAACAGG CCTTTTCTGT GAGCGCTCAC TCATACATTA TGCACGACGT GGCTAAGATC    240
TTTGATGGCA CTCGAG                      256
```

(2) INFORMATION FOR SEQ ID NO:813:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

```

GCAAGCGGCG CATGCAGGAG GAGAAGCAGA AGTCTGTCAA CGTCAAGAAG ACCATCCTGG      60
AGATGCGCTA CGGGGCTGAT GTGGATGCCG GCTCCATTGT GCACGCCGCC CAGAAGCTGG      120
GCGAGCCTCC CGTGTGCCCC GTATCTCGCA TGGCCTCCAT CCCCTCCATG ATCGGGGAGA      180
AGCTGCCAC   CGCCAAGGGG TTGGAGGCCG GGCTGGACAC ACCCAAGGTA GCCACCAAAG      240
GCAACTATAT CGAGGTGCGC ACAGGCGCCG GCGGGGACGG TCTGGCTCGG CCCGAGGATG      300
ACCTCCCGGA CCTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

```

GAATTCGGCC TTCATGGCCT ACGAACTCCT GACCTCAAGT GATCGGCCTG CCTCAGCCTC      60
CTAAAGTGCT GGGATAGCCA CTGTGCCCAG CCTAGCCCTT CTTCAAATGT TTGGTAAAAT      120
TCAGCATTGA AGCCATCAGG TCTTGGGCTT TTTGCTGGGA GATTTTATAT TATGGCATCA      180
ATCTCATTAC TTGTTACTGG CCTGTTTAGG TTTTCAGTTT TTTCATGGTT CAATCTTGTT      240
AGGTTGTTTG TGTCTAGGAA TGTATCTGTT TCTTCTAGGT TTTCCAGTTT CTGGCGGTAT      300
AGTTACTCAT AGTAGCCACT AATTATCCTT TGGATTTCTG CGGTATTGGT TGTAGTGTCC      360
CCATCTCGAG                                     370

```

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCAAGCCTAT CTTTGTAGTCT      60
TCCTAGAAGC ACCGTGTTCT GTGGAAGTCA GCATCAGCAG CTTTGCTGAG GACTCCCCCA      120
TCTTCCTTTC CTTCCTCCGGA AAGCACAGAC CTAAGTGAGT CTTCACTGGA TCCCAGCTAA      180
CAGCTTCTGC CCATTCCTAT CTTTCCACAG AGCCAGTGGC AGCCCCAGCT GCAGCAGCTA      240
CGTGACATGG GCATCCAGGA CGATGAGCTG AGCCTGCGGG CCCTGCAGGC CACCGGTGGG      300
GACATCCAAG CAGCCCTGGA GCTCATCTTT GCTGGAGGAG CCCCATGAAC TCCCTGCTTC      360
CCCTGAACCC CCAGCACTCG AG                                     382

```

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

GCCACGGTGC TCATTAGAC TACCCGTGTG CCCAAGCAGG TGGCAGTACC CGCGACAGAC	60
ACCACTGACA AGATGCAGAC CAGCCTGGAT GAAGTCATGA AGACCACCAA GATCATCATT	120
GGCTGCTTTG TGGCAGTGAC TCTGCTAGCT GCCGCCATGT TGATTGTCTT CTATAAACTT	180
CGTAAGCGGC ACCAGCAGCG GAGTACAGTC ACAGCCGCCG GGAAGTGTGA GATAATCCAG	240
GTGGACGAAG ACATCCCAGC TGCAACATCT CGAG	274

(2) INFORMATION FOR SEQ ID NO:817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

GAATTCGGCC TTCATGGCCT ACAAAAATAC ACCTGTGGTC CCAGCTGCTC GGGAGGCTGA	60
NTTACGAGAG TCCCTTGAAC CTGGGAGGCG GAGGTGCGAG TGAGCTGAAA TCATGCCACT	120
GCACTCCAGC CTGGGCAACA GAGCGAGACT CTGTTNAAAA AAAAAAAAAAT AGCGAGAGAT	180
CGAGAGAGAG TGCACGTGAG AAGACTAGTA GTTGCTATGG ACTGGGGGAG AAGGAACGGG	240
TTACAGGGTT TCTTTTGGGG ATAACGAAAA TGTTCTAAAA CTGGACTGTG GTGATAACTG	300
CACAACTCTG TGAATGTACT AAAAATACT GAACTGGCCG GGCGCGGCAG CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

GAATTCGGCC TTCATGGCCT AGGCAGGGTG TCAACTTATT TAATTCTAAA AATAGTATAT	60
TCATAGAGAT ACTATCATCC TCATTTTATA TATTCAAAAA ATTCAAAGAA GTTAAGTAAA	120
TGCCCCAAAG TCACCCAGAT AATAAGTAGA AAAGATGGTA ATGAAATCCA GGTGGCCTT	180
CGAG	184

(2) INFORMATION FOR SEQ ID NO:819:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

```

GAATTCGGCC TTCATGGCCT ACAACAACAA CAACAAAAAA ACATCATCCG GGAAGCTTT 60
TCAATATCCT GACGTTGGGT CTCTCCAGTG TAGATGGAAA TATGGAATTG GGAATAGACA 120
TCGATATTTT TGGAGGTCCC CAGGGGTTAC CAATGTGCAG ACAGGTTTGG GAACCACTGC 180
ATTAGGCATT TTACATTTAT TTAGGGCTTT CACTGGATTT GTCACCCCAT ACTTTCATAA 240
TCCATTTTTT CTGATTTTTT TTCTGGTTTT TGGTGAGGGT ATAGTTGGGA TGGGGTTTTT 300
TTTTTTGTCC TCCCACCGCT CGCCCCCATC CAGTGTGGAC GTACTCGAG 349

```

(2) INFORMATION FOR SEQ ID NO:820:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 167 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```

GAATTCGGCC TTCATGGCCT A TCTTTCCT TGAAGAATTT GTTGAAGACT TCAGAAGTGA 60
TGCTGGCTGC TTTCTTCATT AGGTTGAGCT CCCCATCCTC CTTTACAGCG ATGGTATATG 120
CCACAACCTGC ACTGATATCT ATTTTGTCAA AGCCTTCAGG TCTCGAG 167

```

(2) INFORMATION FOR SEQ ID NO:821:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 733 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```

GAATTCGGCC AAAGAGGCCT AGCGAAATAA AACAGGGAG TCAGCAAAAC CAGAAATTC 60
AGCAATGTCA GCTCATGACA AGGCTGCATT ATCAGAAGAG GAACTGGAGA GGAAGTCGAA 120
ATCTATCATT GATGAATTC TACACATTAA TGATTTTAAG GAAGCCATGC AGTGTGTGGA 180
AGAGCTGAAT GCCCAGGGCC TACTACATGT TTTTGTGAGA GTGGGAGTGG AGTCCACCCT 240
GGAAAGGAGC CAGATCACCA GGGATCACAT GGGCCAACTA CTCTATCAGC TGGTACAGTC 300
AGAAAACTC AGCAACAGG ACTTTTCAA AGGTTTTTCA GAACTTTGG AATTGGCAGA 360
TGACATGGCC ATTGATATTC CCCATATTTG GTTGTACCTT GCTGAACTGG TGACCCCAT 420
GTTAAAAGAA GGTGGAATCT CCATGAGAGA ACTTACCATA GAATTTAGCA AACCTTTACT 480
TCCTGTTGGA AGAGCTGGGG TCTTGCTATC TGAAATATTG CACCTACTAT GCAAACAAAT 540
GAGCCATAAG AAAGTGGGAG CCTTATGGAG GGAGGCTGAC CTCAGCTGGA AGGACTTTTT 600
ACCAGAAGGA GAAGATGTAC ATAATTTTCT TTTGGAGCAG AAGTTGGACT TCATAGAGTC 660
TGACAGTCCC TGTTCTCTG AAGCACTTTC AAAGAAAGAA CTGCTGCCG AAGAGCTGTA 720
TAAGCGACTC GAG 733

```

(2) INFORMATION FOR SEQ ID NO:822:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

TGCCAGATAG	TTCTGCAGAA	GAAATCACTG	TTTGTCTGA	GACACAGGTA	AGTTCCTCTG	60
AAACTTTTGA	CCTTGAAAGA	GAAGTCTCTC	CAGGTAGCAG	AGATATCTTG	GATGGAGTCA	120
GAATAATAAT	GGCAGATAAG	GAGGTTGGTA	ACAAGGAAGA	TGCTGAGAAG	GAAGTAGCTA	180
TTTCTACCTT	CTCATCCAGT	AACCAGGTAT	CCTGCCCCGT	ATGTGACCAA	TGCTTTCCAC	240
CCACAAAGAT	TGAACGACAT	GCCATGTACT	GCAATGGTCT	GATGGAGGAA	GATACAGTAT	300
TGACTCGGAG	ACAAAAAGAG	GCCAAGACCA	AGAGTGACAG	TGGGACAGCT	GCCCAGACTT	360
CTCTAGACAT	TGACAAGAAT	GAGAAGTGTT	ACCTCTGTAA	ATCCCTGGTC	CCATTTAGAG	420
AGTATCAGTG	TCATGTGGAC	TCCTGTCTCC	AGCTTGCAAA	GGCTGACCAA	GGAGATGGAC	480
CTGAAGGGAG	TGGAAGAGCA	CGTTCGCTCG	AG			512

(2) INFORMATION FOR SEQ ID NO:823:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

GAATTCGGGC	CTTCATGGCC	TACTCTCATC	TGTATCTGTT	TCCTCTAACT	TTACTGAAAA	60
GATAGAATTC	ATTAAGCATG	AATTCTACCA	TCTTCTCCCT	ACTACAGCTC	TGTCAAAAAG	120
ATGTTGCTCT	CTGAGCCCAA	CTCTCCCTCA	GTCCCAGGA	TTCTGTCCCT	GTCCACCTTT	180
AATCTTTTCC	TTTCCTGATT	TTATGTTATA	AGTTATTTAG	ATTTGATGA	GAGATAATCG	240
TACCTAGAGT	ATGGGAGAAC	TATTTAAGGT	TTACAGGTTG	GGTGAACCC	TTGTATATAC	300
TAGATGGTAC	TGTGAGGGCT	TGCCACACTG	TCAGCCTTCA	TCTGAACAGA	GCAGAAAGTG	360
TTTCTGCATG	TTCAACAAGC	CCTGCTGGAC	TGTATCACTT	TTCTCTGTGG	GCCAAAACTC	420
GAG						423

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

GAATTCGGCC	TTTCATGGCCT	AGCGGCCTCA	GATGAATGCG	GCTGTTAAGA	CCTGCAATAA	60
TCCAGAAATGG	CTACTCTGAT	CTATGTTGAT	AAGGAAAATG	GAGAACCAGG	CACCCGTGTG	120
GTTGCTAAGG	ATGGGCTGAA	GCTGGGGTCT	GGACCTTCAA	TCAAAGCCTT	AGATGGGAGA	180
TCTCAAGTTT	CAACACCACG	TTTGGCAAAA	ACGTTTCGATG	CCCCACCAGC	CTTACCTAAA	240
GCTACTAGAA	AGGCTTTGGG	AACTGTCAAC	AGAGCTACAG	AAAAGTCTGT	AAAGACCAAG	300
GGACCCCTCA	AACAAAAACA	GCCAAGCTTT	TCTGCCAAAA	AGATGATCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

```

GAATTCGGCC AAAGAGGCCT AGGAGTAAGG ATGCAGAAAT GATTGCAGCA TATTCATTC      60
TCTACGCAAG GATGTTCTTC GGAAATGGAG GCGACATTGC TGCCTGCTTT TTTGAGGGAA      120
TTGATGATGT TCACTGGAAG GAAATGGGA CATTAGTTCA AGTAGCAACT ATATCAGGAA      180
ACATGTTCAA CCAATGGCA AAGTGGGTGA AACAGGACAA TGAAACAGGA ATTTATTATG      240
AGACATGGAA TGTAAGGCC AGCCAGAAA AGGGGGCAGA GACATGGTTT GATTCCTACG      300
ACTGTTCCAA ATTTGTGTTA AGGACCTTTA ACAAGTTGGC TGAATTTGGA GCAGAGTTCA      360
AGAACATAGA AACCAACTAT ACAAGAATAT TTCTTTACAG TGGAGAACCT ACTTATCTGG      420
GAAATGAAAC ATCTGTTTTT GGGCCAACAG GAAACAAGAC TCTTGGTTTA GCCATAAAAA      480
GATTTTATTA CCCCTTCAAC CTCGAG                                         506

```

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

```

GTGGAGCAG TTCCAGAAGG AGAAGGAGGA ACTGGACAGG GGCTGCCGCG AGTGCAAGCG      60
CAAGGTGGCC GAGTGCCAGA GGAAACTGAA GGAGCTGGAG GTGCCGAGG GCGGCAAGGC      120
AGAGCTGGAG CGCCTGCAGG CCGAGGCACA GCAGCTGCGC AAGGAGGAGC GGAGCTGGGA      180
GCAGAAGCTG GAGGAGATGC GCAAGAAGGA GAAGAGCATG CCCTGGAACG TGGACACGCT      240
CAGCAAAGAC GGCTTCAGCA AGAGCATGGT AAATACCAAG CCCGAGAAGA CGGAGGAGGA      300
CTCAGAGGAG GTGAGGGAGC AGAAACACAA GCTCGAG                                         337

```

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

```

GAATTCGGCC AAAGAGGCCT ACAGGTACAG AATCATATGA ATGTTTCTTT CTTTCTTTCT      60
TTTCTTTCTT TCTTTCCTTC TTTCTTTCTT TCTTTTTTTG AGACAGAGTC TTGTTCTGTT      120
GCCAGACTGG AGTGCACTGA CTCAATCTCA GCTCACTGCA ACCTCCACCT CCCAGGTTCA      180
AGCAATTGTC CTCCCTCAGC GAGGACCTGC CTCGAG                                         216

```

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

```

GAATTCGGCC AAAGAGGCCT AAAAAAAGA AGATGGGTTT TTTAAGTCCA ATATATGTTA      60
TTTTCTTCTT TTTTGGAGTC AAAGTACATT GCCAATATGA AACTTATCAG TGGGATGAAG      120
ACTATGACCA AGAGCCAGAT GATGATTACC AAACAGGATT CCCATTTCGT CAAAATGTAG      180
ACTACGGAGT TCCTTTTCAT CAGTATACTT TAGGCTGTGT CAGTGAATGC TTCTGTCCAA      240
CTAACTTTCC ATCATCAATG TACTGTGATA ATCGCAAAC CAAGACTATC CCAAATATTC      300
CGATGCACAT TCAGCAACTC TACCTTCAGT TCAATGAAAT TGAGGCTGTG ACTGCAAATT      360
CATTCATCAA TGCAACTCAT CTCGAG                                     386

```

(2) INFORMATION FOR SEQ ID NO:829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

```

GAATTCGGCC AAAGAGGCCT AGCTGAATCC TAGATTTCAG CTTCTCACTC AGAATTTAAG      60
CTGTTTTTCAG TACCAGAAAT ATTTAAGACT GTTAGTTTAA CTTCTAAGAA TAGCAGATAA      120
AGCGTATAGG TGTTTTGAGA TAACCGTATT CATAGGAAAA ACAAACATAA AACTTTTCATA      180
ATTTTGGGAA GAGTTACACA CAAAATATC ATCATTGAAT AATTAGTACA ACAAAAATGC      240
ATTTGTTTGT CCTAAAGGTT GAAATGAACA GAATCATGAT GGAATACTC GAG              293

```

(2) INFORMATION FOR SEQ ID NO:830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TATGTCCTAT TCCTGTGTC      60
CTGCAAGACC CCCTTTGGTT TGGTTTTCTT TTCTTTTCTT TTTTCTTTT TTGAGACTGC      120
GTCTTGCTCT GTCTCCAGG CTCGAG                                     146

```

(2) INFORMATION FOR SEQ ID NO:831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

```

GCGATTGAAT TCTAGACCTG CCTCTCATCC ACTATTGTCT TTCCCAATT TTTTCTAGC      60
CTTATCTTCC AGAATTCCTC TCAGACATAG GTGGCCCTGG TGCTTGATC CTGTCTCTAA      120

```

GTTGGTCTTT CATGTTTTCT CTCCTCAGAT TGCTCGAG

158

(2) INFORMATION FOR SEQ ID NO:832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC	TTCATGGCCT	AGCTGATTTA	AATCTAAAAA	CTGGATAAGA	AGCTGTGGCT	60
TGTAATTAAA	AATAGACCTT	TATTCAC TAG	ACCTACAGTT	TGCTTTTTTC	ATATGTTAAG	120
AAAAGTTTAA	TATCCTGCT	CTCTATTTC A	GTTCTAGGGG	CACCACTATC	AGTTAACCCCT	180
AAAGATTCT	GTGGGTGAAA	CCATTTTGAT	TACCATCTTG	CTCTGCTGCC	AGTTATGGTA	240
ATCAAAC TCT	CTTTGTTTCT	GGATGCTAAA	TCTGTCCACT	TGTGCCTTAA	CTACATCCTA	300
ATCCCGTCA	ACTCGAG					317

(2) INFORMATION FOR SEQ ID NO:833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGGCC	TTCATGGCCT	AGCCCCCGGA	GCCCCACCACA	GTCCCCAGAG	TGTGATAAAA	60
ACAATTTTAA	TACTTCTTAT	CTCTTTCTAG	TAGTCTACAT	CCCATTCCCA	GTCTTTCCAA	120
TCATAAAAAT	TTGTAGTTTA	TTTAGTTCAC	ACTTGAACGT	CCTATGAAAC	TGTTTTAAAC	180
CTTTTACCTA	TCTTGTTTCT	TGTCATTATT	CTTAAGCCAT	TGATACAGAA	ATCAGAACCA	240
AATTTAATAT	TGTTGTGGGT	ATGAGACAGT	TTCTGT CATG	TTTAAATTTT	TTCCTTAAAG	300
TTTTACTATG	TACTTCATAT	ATACCGGGCA	CTTCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:834:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCGGCC	TCATGGCCTA	TGACTTTTAA	GTTTCTTATT	ACACTGAGAA	ACACCTAACT	60
ATCCTAATAG	AATTAAATTT	CCCTAAGTTA	TAAGACACTT	GAATTTT TTA	AAAAGAGATA	120
ATTAAATTTT	TCCTATATTT	TATTCATTTT	ATTTTTCAG	TCATGCTCCT	TCTGTATCTC	180
CTATATTTTA	TTATATTACT	TACATGGCTT	TATTTT TACA	ATAACTCTTT	TTTTCCCTTC	240
TTTTATTTAT	TTGTTTATTT	TTGGAAACAG	AGTTTCCTTA	TGCTGCCAC	GCTGGTCCTG	300
AGCTCAAGCA	ATCTTCACGC	CTCAGCCTCC	CAAAATTATA	GGACTACAGG	CATGAGCCAC	360
TGTGCCTGGC	CTAAGCCACT	GCACCCGGCG	CTCGAG			396

(2) INFORMATION FOR SEQ ID NO:835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

```

GAATTCGGCC TTCATGGCCT ACTTTTACTC ATGCATAATT TTGTAAAATC CTACATTGGT      60
CATTTGGAAA ATATTGATTC ACTGAGTAAT ACAACTCTTC CAAATGTTGA ATGTTTCATT      120
CTACAATATC AGAAACTCAA TTTGTTAATG TTAATACTAG TCTCATCAGA AATGTCCTTA      180
AGTATTTGTT AACTGGCAAA CTCATAGTGA CGACTACAGG CTTCCAGAA TTTTCATTTT      240
CATTTGAAGT CTGAATTTTA TCAACTATAA ATACTGTCAG TTGTTTCCCT CGAG          294

```

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

```

GAATTCGGCC TTCATGGCCT ACTCTGATAC TAACTGTAGT CTACATTTAT ACATTGTGTC      60
TGAATGCTGG TTTTGTGGCT TCACTAGCTC CCTTTTCTC TCTCCTTTT TATCCTGTCT      120
TTTGCTGCTG CTTTCCACCT TCTGTCCAGC TCCATCTTCA GACAGCTCCC TGTATAACGC      180
TCCACTTCCT GAGTATTCCA GTTGCCAGCC TCCTTCAGCA CCTCCTCCAT CATACGCTAA      240
AGTCATCTCA GCTCCAGTGT CAGATGCCAC TCCTGATTAT GCTGTAGTGA CTGCTTTGCC      300
ACCTACTTCC ACACCCCCTA CACCACCACT GCGACACCCA GCGACACTCG AG          352

```

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

```

GAATTCGGCC TTCATGGCCT ACCGGACCTT GAAAATGGAA TGTTCAGAAA CACATGTGCA      60
AGGGAGCTGT GCCAAGCTCA TGTGCGAAC AGGCCTCCTG ATGAAGCTTC TCAGCGAGCA      120
GCAGGAAGCA AAGGCATTGA ATGTAGAATG GGATACGGAC CAACAAAAAA CAAATTATAT      180
TAATGAGAAC ATGGAACAGA ATGAACAGAA AGAGCAGAAG TCAAGTGAGC TCATGAAAGA      240
AGTCCAGGA GATGACTATA AGAACAAACT CATCTTCGCA ATATCTGTGA CTGTAATACT      300
AATAATTTTG ATTATAATTT TTTGTCTTAT AGAGGTGAAT TCACATATGC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 540 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

GAATTCGGCC	TTCATGGCCT	AAAAAATCTA	GTTGAGAAAA	AGAAAGAAAC	CAAGAAGGCT	60
AATCACAAGG	GTTCTGAAAA	TAAAACTGAT	TTAGATAATT	CTATAGGAAT	TAAAAAAATG	120
AAAACCTCAT	GTAATTTTAA	GATAGATTCA	AACATAAGTC	CGAAGAAGGA	TAGCAAAGAA	180
TTTACACAAA	AAAATAAGAA	AGAGAAAAAA	AACATTGTTC	AACATACTAC	AGACTCTTCT	240
CTCGAAGAAA	AACAAAGGAC	ATTAGACTCA	GGCACCTCTG	AAATTGTGAA	ATCTCCCAGA	300
ATCGAGTGTT	CTAAGACAAG	AAGAGAAATG	CAATCAGTGG	TTCAACTCAT	AATGACAAGA	360
GACAGTGATG	GTTATGAAAA	CTCAACAGAT	GGTGAAATGT	GTGACAAAGA	TGCTCTGGAG	420
GAAGATTCAG	AAAGCGTTAG	TGAAATAGGA	AGTGATGAGG	AATCTGAAAA	TGAAATTACA	480
AGTGTGGTA	GAGCTTCAGG	TGATGACGAT	GGAAGTGAAG	ATGATGAAGA	GAAGCTCGAG	540

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 539 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

GAATTCGGCC	TTCATGGCCT	AGCATTTCAT	CTCTAAATTG	GGGAGAATAG	AAGCATCTAC	60
TTTATGTAGT	AGCCAGGATT	AGAAGAGGGA	GGAATAACTG	GGCCCTGGAT	AGAATGTGAT	120
GAATGTATAT	TCTTAATGAG	AAGTGGAAT	AATTTGTGGT	TGAGAGCTGT	GCCTCAGATC	180
AGAGTGACAG	GATACATGGC	TAGGCTATAT	TTCCAGCAG	ATTAAGAGCT	GCAGCCCAAG	240
ACTCTGAAAT	ATGAAGAAAA	AAGGAGAAGA	TGACAGCATA	TCTTTTAA	GAAATATTTT	300
CCAGCCAAAT	GGTGCAGCAG	AGGACTTCCA	GGAATTTGTT	CTTGTTCTGT	ATCAAAGGTG	360
AAGAGTTTCGT	AGCCTTCAAG	GAAACAAGAA	ACCATGGGAT	GGAGTGAAGG	AAGGTGGCCT	420
GGAACCAGCT	GCTGAGCCTC	TCTGAGCCCC	AGTTTCCTCG	TCTCTAAAAT	GGGGCTGATC	480
TCCTCTCCCT	CAGACTGTTG	TTGCAGGAAT	TAAACAGGT	GTTGAGTGGG	CTGCTCGAG	539

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 297 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

TTCCACAGCT	CTGATATTCA	GTAACCCATG	TGGAGAACAA	AAGGATTTTG	CTCCATGAAG	60
TCTAATTGCC	TGCTGAATAA	ATAAATAAAT	AGATGAAGCA	CTGCATGCAT	TAAATGAAAG	120
TAAATATTGA	CCCTGCCACC	ATATGTTTGC	TGGGGTGCTG	GCTGAAGTGT	GCTGGCAGGT	180
CCAATCAGTC	AGAGTCTGCC	AGCCCAGCAA	GCAGGAGAGA	CAGGAATATC	AAAAAGGCGC	240
TCCTGCTTGT	GCCTTAATCT	TTGTCCAACC	CCCAATTCCT	CCACCACAGG	CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

```

GAATTCGGCC TTCATGGCCT ACCTTATTAG TGATTGGCGA TTCAGGCCAT GTCATAGGGC      60
CTTTCAGACA AAAGGTCTTT ATCCCAGTCA GCTGGCCAAA ACATTAACCT TGGATTTCTT      120
ACCCTGCTAC AGCATCTTCT AGAAAGGCAG CAAGATAATA TTGTGGCAGT GCACAGATAA      180
CATCAGGGTA GACTTGACTG GAGAAAACCA AATTCTGCGC TTGCTCCTGT GTGCCCCCAT      240
CCAGCTGTGC ATGCACACAC AGGACACCTT TCTAGTATGA AGAACTTGCA TCATGTCTGC      300
CCTCTATTGA GCACCCCTT CTAGAAATAC TTCCAAGTAT TAGCATGTGA ACTGTTGACT      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTG ACTTATGAAT TCTTCTGTG TGATCGTAAA      60
AGTGCGAGAGT TTATTGCAAA GAGAATCTTC ATCTGAATCC TCAGCCTGGG AATCTTCCTC      120
TTCCACCGCC AACTCCTCCA CCCAGTCTGA GTCTACTTCA ATGGCCCGCT CTCCCCATC      180
CGCACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

```

GAATTCGGGC TTCATGGCCT AAGCTCCGCG AGCCCCCTAC AACTCGTTTC CTTCCGTTCA      60
CCTTCGCAGG GCGGCGACTG GCGGCGCGAT GGACCTGACC GGGCTCCTGC TGGACGAAGA      120
AGGCACCTTC TCCCTCGCCG GCTTCCAGGA CTTCACGTTC CTCCCAGGAC ACCAGAAGCT      180
GAGTGCCCGG ATCCGAAGGA GGCTCTACTA TGGCTGGGAT TGGGAAGCCG ACTGTAGCCT      240
GGAGGAGCTC TCCAGCCCGG TGGCAGACAT TGCTGTCGAA CTGCTCCAGA AGGCAGCCCC      300
CAGCCCTATT CGCCGACTCC AGAAGAAATA CGTAGCTCAT GTGTCCCGGG AGGCATGCAT      360
CTCCCCATGT GCTATGATGC TGGCTCTGGT GTACATTGAA CGGCTCCGGC ACCGAAACCC      420
AGACTACTTG CAGCATGTGT CATCCTCTGA CTGTTCCTG ATCTCCATGA TGGTGGCCAG      480
TAAGTACCTC TATGATGAAG GGGAGGAGGA GGAGGTCTTC AACGACGAAT GGGGAGCTGC      540
TGGGGGTGTG GCCGTGCCCA CTCTCAATGC CTTGGAGAGG GGCTTCCTGA GTGCCATGGA      600

```

TTGGCATCTC TACTGAAC GCTCGAG

627

(2) INFORMATION FOR SEQ ID NO:844:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

GAATTCGGCC TTCATGGCCT ACCTGAGCTG CCGAAGCCGC CGTCCTGCTC TCCCGCGTGG	60
GCTTCTCTAA TTCCATTGTT TTTTCTAGAT TCTCTCGGGC CTAGCCGTCC TTGGAACCCG	120
ATATTCGGGC TGGGCGGTTT CGCGGCCTGG GCCTAGGGGC TTAACAGTAG CAACAGAAGC	180
GGCGGCGGCG GCAGCAGCAG CAGCAGCAAT CTCTCCCGA ACACGAGCAC CACAGGCGCC	240
CGAAGGCCGG AACAGGCGTT TAGAGAAAAT GGCAGACGAT ATTGATATTG AAGCTCTAGC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:845:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

GAATTCGGCC TTCATGGCCT ACCAGAAAAA ACTTACATTG AAGAGAGGAT TCCTTGTTTT	60
GACTATGTGT GTTTCTGCCG TCTTAGGCAG CCAACGTATT GGTTTACATG GATCTGGAGG	120
ATTATGCACA CTAGTGTGTA GTTTCATTGC AGGGACAAAA TGGTCCCAAG AAAAGATGAA	180
AGTCCAAAAG ATTATTACGA CTGTATGGGA TATTTTCAA CCACTTCTTT TTGGTTTAGT	240
TGGAGCAGAA GTATCTGTTT CATCGCTTGA ATCAAATATT GTTGGCATAT CTGTTGCCAC	300
TCTAAGTTTG GCATTATGTG TTCGAATTTT AACCACATAT CTATTGATGT GCTTTGCTGG	360
TTTTAGTTTT AAGGAGAAAA TATTTATTGC TTTAGCATGC ATGCTCGAG	409

(2) INFORMATION FOR SEQ ID NO:846:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

GAATTCGGCC TTCATGGCCT AGGCACGGTA CATACGATTA TTATAAACAT CAGCTGCGGT	60
TCTGGGAGTG AGCTTGTC GTGTAGTGC CATCTCCCTG ACAAATCTGA CCTGTACCCA	120
CATCTCAGGC TGGGAAGGAG TAGCTGGGCC TCCCTTTAAT GCAGCGGCAC TGGTTTGGGT	180
CACAAGAGCT GGTGATCA ACCCTGACT CCCCTGGCG GGAGGTGCTC GTCACATCTG	240
GGAGCCTGAG CAGAGGTGCC GGGGCTTGG AAGCTGGAGA AATGATGGAT CTTTCTCCAG	300
GAGAAACAAT TCTTATCTT ACATCNGCCC CGTGCTCCAA ATGAAGAGCG CGTTTGATA	360

GCTGCTCGAG

370

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

```

GAATTCGGCC TTCATGGCCT ACGCGCGGCC GAGCGGAGGC GGAGTCGGCG CCGAGAACAT      60
GGCTGGAGGC AAAGCTGGAA AGGACAGTGG GAAGGCCAAG GCTAAGGCAG TATCTCGCTC      120
ACAGAGAGCT GGGCTACAGT TTCCTGTGGG CCGCATCCAC AGACACTTGA AGACTCGCAC      180
CACAAAGCCAT GGAAGGGTGG GTGCCACTGC TGCCGTGTAC AGTGCTGCGA TTCTGGAGTA      240
CCTCACTGCA GAGGTGCTGG AGCTGGCAGG TAATGCTTCT AAGGATCTCA AAGTAAAGCG      300
TATCACTCCG CGTCACTTGC AGCTTGCAAT CCGTGGTGAT GAAGAGTTGG ATTCTCTTAT      360
CAAGGCTACC ATAGCTGGGG GTGGTGTGAT CCCTCACATC CACAAATCTC TGATTGGAAG      420
GAAGGGACAG CAGAAAACCT CTTAGAGGGA TGCTTAAACC AACCTCTTCC TTCCCCGTCA      480
TTGTACTGTA ACTGGGACCT CGAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

```

GAATTCGGCC TTCATGGCCT AAACAAGCAG AGGGACTCCC CAGATAGCTT CATACCCAGT      60
TTAGCTTTAT AACAAAGTGA GTTTTAGGCT CTGCTTTGGC ATACTTGAGA GCACAATGGC      120
TGCTTCAAAA CAGGCATTTC AACTCGCTGT TTAATCAAAT TCTTCTTTAA TCTAAAGTGA      180
GTTTCTCATA GAGAGCATAT AACTTTAACC CTTGAACAAT GTAGGGGTTG GGGTGGGGAG      240
TCAACCCCTT GTGAAGTAAA AATTTGCTAA TAACTTTTGA CTCCCCCAGA ACTTAACTAT      300
AAATAGCCTA CTATTGATTG GAAGTGTAC CAACAGCATA CACAGTTAAC ATATATTTTG      360
TATGTAATAT GTGTTATCCA CTATATTCTT ACAATAAAGT TAGCAAAAGA AAAAAATGTT      420
ATTAGGAATC CTCGAG                                         436

```

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

```

GAATTCGGCC TTCATGGCCT ACATGAGCCC AGGAGTTGAA GGCTATAGCC TGGGTGACAC      60
AACAAAGGCC CATCTCTAAA AAATATATAA ATAAATAAAG TTAAGGATGC TGCGTGGTTT      120

```

```

ATATGTTTCAG AAAGAGATTG AGGTAATAAA AGAGTTTTTG GCCAGGCTCT GGCTTACACC 180
TCGGCCTCCC AGAGTGCTGG GATTACAGGC ATGAGCCACC GCGCCAGCC GGAAGTAGGT 240
TTTTGAAGA GTCAGCTGAA AACAACTGTT GCCGTATTCG GAATTAAAAA TTTTAATTTG 300
AAAAATATTAT AACTGAGAAA TTATTGTATA TATTTATGGT ATACAGCGTG ATGTTATGAT 360
ACATGTATAC AATGCAGAAAT GATTAAATCA AGCTATTTAA CATAGCTGTC ACCTCAAATA 420
CTATTTTTTGT GGTGAGAAAT TTGAAATTTA TTATCTCAGG AATTTTGAAA TGTACAATAC 480
ATTATTATTA ACTGTTCTCG AG 502

```

(2) INFORMATION FOR SEQ ID NO:850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

```

GAATTCGGCC TTCATGGCCT /GATAAAAAG AAACAAAAAA GAGAAGATAT GATAAGAGAA 60
CAGAAGATAT ACCATAATA TTTGGCACAG AGACGTGAGG AAGAAAAAGC TCAGGAGAAA 120
GAATTTGACA GAATATTAGA GGAAGACAAG GCAAAGAAGT TGGCTGAGAA GGACAAGGAG 180
CTGAGACTTG AAAAGGAGGC AAGGAGACAG CTTGTGGATG AGGTCATGTG TACAAGAAAA 240
CTTCAAGTTC AAGAAAAGTT GCAACGAGAA GCTAAAGAAC AGGAACTCGA G 291

```

(2) INFORMATION FOR SEQ ID NO:851:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

```

GGTTCGTAT TCTGTTGGTT GGAGTGTCT ACTATTGTTG GGTGGAGTGT TCTATCTTCT 60
GTTGGGTGGA GTGTTCTGCT GTTGTGGGT GCGGTGTTGT ATATTCTGTT GTTGGGTGGC 120
GTGTTGTATA TTCTGTTGTT GGGTGGCGTG TTCTATCTTC TGTGTTGGG TGGATGGATT 180
GTTCTGTATT CTGTTGGGTG GCATGTTCTA TCTTCTGTTT TTGGGTGGAG CGTTCTATCT 240
TCTGTTGGGT GCGCATTCT ATATTCTGTT GTTGGGTGGC GTGTTCTGTA TTCTGTTGTG 300
GGTGGCTCGA G 311

```

(2) INFORMATION FOR SEQ ID NO:852:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

```

GAATTCGGCC CTTATGGCC TAGTCTCATC TCAGAGTACT CAGAGAACT ATTTTTTAAT 60
CTCTAGATAT CAATCAATGA ATATTTATTA TTAATACCT GCTATGTGCC AGATGGTGT 120

```

AATTATAAGT	TTGTTCTCTT	TTTGTCTGTC	TACTTAGGCT	TTTATCATTT	TGTCCTATCA	180
TTAGGGAAGT	GGCTCCNNNN	CTTACAGCTA	ATTTTTTTTT	CAATTTACTA	ATGACTTTTT	240
GTGGAGGTGG	GGATCTCTTC	TGTTCAACAT	TTTCTATGAT	TCATCTCAAT	CCTCCAGTGA	300
TTATTAAAAA	ACAGTTGCAG	TAAGTTCAGT	CATAGGGGCA	CTGGAATGAG	TCCTTAAAC	360
TTTATGCTGC	TGCTTTTGCA	ATGATGGATT	GCCTGAGAA	TAAGGAAAGA	TAAGTACTCT	420
CTTGGTCACT	GTATTTCCAA	TCAACCATAT	CCTCCAGAA	TATGATTCT	TCCCTCAGGC	480
ATTTTAGAAA	AGAGACAAGA	GACAGATTTT	TTTTTTCAGG	CAATGACTCG	AG	532

(2) INFORMATION FOR SEQ ID NO:853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

GAATTCGGCC	TTCATGGCCT	ACTTTTGTAT	AAGCAACTAG	TGCTCTCATT	ATCAGAGGTC	60
CCTGAGGGGC	CCTACAGGCC	CCCCCAGGTT	CTGCCCCCAA	GATTCTAAGA	GAGACCTTGT	120
GCTAGGGCTC	TAGTCTTGAT	GTTCTTTGCA	TTGTTGGAT	ATGAAGCCCA	GGATATGTGG	180
GCACAATAAG	GTAAATCATG	AGATGTGAAG	GAGAATGAAG	ATCAGGCCAG	AGGTCACCAT	240
TCATTGAAGA	GCCAGAGAAA	AAGAAAATTA	GTGCACAGAT	TTGTGTAGAT	TTACAGAGAA	300
CTTCTATTTG	CTGCAAGAAC	TTCATCAGGC	GCTGCACCAT	GCCTGATTGT	GAAAGGAGCT	360
TCTTTGGGGC	CTGATAGAAC	TGAATTAATA	TGAAGAAATT	GAAGTGGCTC	TCGAG	415

(2) INFORMATION FOR SEQ ID NO:854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

GAATTCGGCC	TTCATGGCCT	AGTAAAATTA	GCTGAAAAAT	AATTTTCCAA	TGCAAATACT	60
AATGAGGGTT	ATATGACCGT	TGTCCAAAGC	ATTTGCAGTG	CTGCATGACA	TTTGTCTTAA	120
AACCTGACTC	TTAAACATT	CCTTGTGAAA	ATAGAAATAT	TCCCATGCCT	AGATTCCAAA	180
TAATAAAAGA	CACTGAGAGT	GTTTTCAAAA	TTAATGGACT	GATTTAAATT	TCAGTGAAAA	240
GCAGCTTTT	AAACTAAAT	TGTCTGGATG	TGGCCTCCCT	GTGATCACTT	CCAAGTCTT	300
ACTGCCAACT	TCTGGCGGCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 616 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

```

GAATTCGGCC TTCATGGCCT AACGGCCTTC AGATGGAAGG AGGGCAGGTG CATATCTGTT      60
AGCAAAATCT TCACAATCAT CTTGAGTTTC TCAGCAAAGT CGGCCTGGCT GGAAATTCCT      120
GGCGCTGCCA TGCTGAAGGT GACCAGCAAC ACAGCCCCCA GGATGGTCAG TTGTTCCAGC      180
TGCAACTGGA GCTCGTGGAA GCGAGACTGG TCCATTAAAA CTGTTTCGGG GAACGGCCTC      240
TGGAGGTGGT CCCACTTCAG AAGCTTCAGG TAAGCGTAAT TCTGGACAGC AACAGGGCTC      300
AGCCTGGGCA TGTCCTCCAGA GCCAGCAGCC ATTCCCCCCA CTGGCAGGGC GTGTTTATAC      360
TTCTGAGTCA TAAGGTCCTC TGAGGCTTCT TCCAGCCACT GGGTGACAAA GTCCAGGGAA      420
TTTGGTTGCC TCTCCAAAAT CTCTTGAAAC TTCTTCCTTT CGTATTCAAC TGACTGCTGC      480
ATGAGATGAG GCCTGATGCT ACTGATAGCA AAGTTGGCCA TGTCCACTTT CATTAGGTCC      540
AACACAGAAA AAATTTCTCT GAAAAGGGGC ACTATTTCTT TAATGTCCTT TAGTTTCTTA      600
ACTTCCTCAT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:856:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

```

GCTCTGGGTG AAAAGATCTC ACACCAATGT ACATAATGTG GCCATCCTTT CCATTTTCAA      60
GAAGTTGCCT TGCTTTGATA CTGCAAATTC AGTATTTGTA CACTGGAATG ATAAAAAGAT      120
GTTCCACTTT CTTTTCAGCC AGAAAGCTTC CTCGTTGTGT GTGTGCGTGT GTGTCCCATC      180
CTATTGCCTG TTCTTTCTAA ATCTACATTT TGTACCTTA TCCAATACTT GCTTTAGCAA      240
GAACATTATG GGGCCACCA TATTCCACAG GGCCATGCCA ACCTTTGGAA AAAAGGTAGG      300
TCAAGGAAGA AATCAGAACA AACCCTGTGA CCATTCCACC TCCTTGCACT TTGGGCTTGG      360
GTTTGGAAAC TGACCAGCAA GCTGGAGCTG CCACCACAGA GAAACATCAA AGCAAAGGG      420
TTCCAGGACC AGAGATTAGG TAAGTAGCTA CAGGCCAGAG GAATGCTTCC CTCTCTAGAT      480
CAACAAGCAC CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:857:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

```

GTTTCATGGCC TAGATGCTGG TTTGTTTTTG TTTTCGTTTT TTTGAGACAG TCTTGCTCTG      60
TGACCCGGGC TGGAGTGCAG TGGTGCATC TCGCTCATTC CAACCTCTGC CTCCCAAGTT      120
CCAGCAAGTC TCCTGCCTCA GCCCCCACC GAGTAGCTGG GACTACACGC AAGTGCCACC      180
ACGCCCAGCT ACTTTTGTG TTTTGTAGTAG AGATGGGGTT TCACCATGTT GGCCAGGCTG      240
GACTCGAATT CCTGACCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:858:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 441 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

```

GAAACTATAA TCATCAGTAC TGTAATGAGC AATTATGAGG CCTACAAGCC TTCCACAGGA      60
GCTATGGGAG ATCGACTAAC GGCAATGAAA GCAGCTTTCC AGTCACAGTA CAAGAGTCAC      120
TTTGTTCGAG CCAGTTTAAAG TAATCAGAAG GCTGGAAGTT CTGCTGCTGG GGCAAGTGGG      180
TGGACTAGTG CAGGGAGCTT GAATTCTGTT CCAACTAACT CAGCACAAACA GGGCCATAAC      240
AGTCCTGACA GCCCCGTCAC CAGTGCCGCC AAGGGCATCC CAGGCTTTGG CAATACTGGC      300
AACATCAGTG GTGCCCTGT GACCTACCCG TCTGCCGGAG CCCAAGGAGT CAACAACACA      360
GCTTCAGGGA ATAACAGCCG AGAAGGGACT GGGGGCAGCA ACGGGAAAAG AGAGAGATAT      420
ACTGAGAACC GGGAACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

```

GAATTCGGCC TTCATGGCCT ACTGGTCGCC AATGTGCTGC AGGTCATGGC TCCGGAATCA      60
AATTGGGCTC AAACGGGGCA AGCTCCAACA CAGTGGAGCC TGGCGCTACT CCCACCTCCA      120
CCTTGCGGAT CTCAGAGCTG CAGGATGGCT CTGCCCCCGG CACCCTGAGC TGGCCCCGCT      180
TGGGGCTGGC ATTGGGGGAC AGTGTGTTCT GGGCGTCTCT GCTCCTCTCT GCTGGTGCTT      240
GTGCCTCTGC TGGCCGCCCC CTCATAGATG TCAGAGCCAC AGGACGGCCC CGCAGAAATCC      300
CTGCCCGGAC CCTGCCGGGG GCTGGCTTTG GTGCACATGC AACTCGTCAT CGTGGTCCCC      360
ATGGGCACCT CTGCTCTTCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

```

GAATTCGGCC TTCATGCCTA CGTTTCCCGA GAAACCAAGC CACAAAAAGT ACAGGGCCGC      60
CCTGAAGAAG GAGAAACGAA AGAAACGTCG GCAGGAACTT GCTCGACTGA GAGACTCAGG      120
ACTCTCACAG AAGGAGGAAG AGGAGGACAC TTTTATTGAA GAACAACAAC TAGAAGAAGA      180
GAAGCTATTG GAAAGAGAGA GGCAAGATT ACATGAGGAG TGGTTGCTAA GAGAGCAGAA      240
GGCACAAGAA GAATTCAGAA TAAAGAAGGA AAAGGAAGAG GCGGCTAAAA AAACGGCAAG      300
AAGAACAAGA GAGAAAGTTA AAGGAACAAT GGGAAAGAACA GCAGAGGAAA GAGAGAGAAG      360
AGGAGGAGCA GAAACGACAG GAGAAGAAAG AAAAAGAGGA AGCTTTGCAG AAGGGCTCGA      420
G

```

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

GGATTTCTTT	GGAATGGGCA	AAGAAGTGGG	GAATCTGCTA	CTGGAAAAC	CACAGCTTCT	60
GGAAACCAAA	AACGCCTTGA	ATGTGGTGAA	GAATGACCTG	ATTGCCAAGG	TCGACCAGCT	120
GTCCGGGGAG	CAGGAGGTGC	TGAGGGGCGA	GTTGGAGGCT	GCTAAGCAGG	CCAAAGTCAA	180
GCTGGAAC	CGTATCAAGG	AGCTGGAAGA	GGAACGAAA	AGAGTGAAGT	CCGAGGCCAT	240
CATCGCCCGC	CGTGAACCCA	AAGTTCTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 288 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

GCGGCTCTTT	GGGAGGTGGT	CAGGGGAAAA	GATGGTCAGT	GCTTTTTCTG	GACAAATCCA	60
GGGGCCAATT	GAGGTGGGGA	GTCTATGAGA	AGGGCCCTGT	CAGCTGAGGC	GAGGGAAAGG	120
GCAGAGGACC	TAGAATAAAA	GGATATGGCC	TCTCTGTGCA	CTAGCAGGAT	GGGTAGGAAA	180
GGGAGATATG	AAAAGACGAA	ATGGGGACCG	GGTGC GTGG	CTCACGCCTG	CAATCCCAGC	240
ACTCTGGGAG	GCCAAGGCAG	GCAGATCACC	CGAAGTCAGG	AGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 326 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

GCTCGAGTGG	AATGGGCCGA	GGAGATGGAT	TTGATTCTCG	TGGCAAACGT	GAATTTGATA	60
GGCATAGTGG	AAGTGATAGA	TCTTCTTTT	CACATTACAG	TGGCCTGAAG	CACGAGGACA	120
AACGTGGAGG	TAGCGGATCT	CACAACTGGG	GAACGTCAA	AGACGAATTA	ACAGAGTCCC	180
CCAAATACAT	TCAGAAACAA	ATATCTTATA	ATTACAGTGA	CTTGGATCAA	TCAAATGTGA	240
CTGAGGAAAC	ACCTGAAGGT	GAAGAACATC	ATCCAGTGGC	AGACACTGAA	AATAAGGAGA	300
ATGAAGTTGA	AGAGGCTCTT	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:864:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 546 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

```

GGAATGGGGA GAGGGATCTA CCAAGGTNAC AGCAGTTTTT TGAGCAGCTG GCACGTGCCT      60
CTGCTGCCAA CATGATGAGG TACAGAACCC AGCACAGGGA ATGCTCAGCC TGTGACTGTG      120
AGCTGGATGT GAGAGTCTCC TGAGGACCCT CGGTATACTC AGAGCATTTC CTCTCAGGGT      180
GCAGGAAGAG GAAAGCAGAG GAAGTGGACT TGAAGGACCA AAGGTGGGAT CCTAGCTGGG      240
CCAATCACTG AGAAGCCATG TGGTCTTGGG CAAGTCATTG CCTTCTCTGA GCCTCAGTTT      300
CCCCATCTGT AAAATGGAGG TAATGATACT ATGCCTACCT CATCATCATG CTGTGAAGAT      360
TAAATGAGTT ATGCCATGGA AGTGCTGTAC ATTACCCATT GATAATGTCT CAGTGGCCTC      420
TCAATGAAAT GGAGTGTGAC AGAGTGCCAC ACTCTGAAAC GGCTCATCCC CGGTGATGGT      480
GCTGGGACTA GAACCCGGGC AACCTCGCAG TGCCATGCCC TACTGCATCA CTACGTCCAC      540
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:865:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 808 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

```

GAATTCGGCC AAAGAGGCCT AAGGATTCAT AGTATAAATC TTAAATTTAT CACAGTCTGT      60
ATTAAGTAAT ACTAAACCAC TTCGCATATA AATACATCAC AACAGTATAC TTCCGTTTAT      120
GCTATCTTGG TCTTTGTACT TTTGTTTTTG TACATTTTAC TTGGCATAA ATGTCAAAGT      180
ACAGTATGTG TATTTAGCTT TAAATATTCA TTTGCCTCTC TCCTTAATGT AAAAAGGCTT      240
CTTCTCAACT TCCTGACATT TCTTGCTAAA CTATACACGT CTGCCCTGTT TTCCAACAGC      300
ACACTGTCTT GTACTGTCCC TTATTTATTT TTTTTTTTTT TTTTTTTTGG AGACGAGCTC      360
GTTCTTTGCC CAGGCCGGAC TGCAGTGGTG CTATTCGGC TCACTGCAAA CTCTGCTTCC      420
CGGGTTCACG CCATTTTCCG GCTTCAGCTT CCCGAGTAGC TGGGACTACA GGCGCCCGCC      480
ACCACGCCCC GCTAATTTTT TGTATTTTGA GTAGAGATGG GGTTCCTCCG TGTTAGCCAG      540
GATGGTCTTG ATCTCCTGAC CTCGTGATCC GCCCACCTCG GCCTCCCAA GTGCTGGGAT      600
TACAGGCGTG AGCCACCGCA CCTGGCCTAT TCTGTCCCTT TTAAAGCAG TTCTCTTTTA      660
AAAAATTGTG GTAAGATATA AATCACATAA AATTTGCAGT TATAACCATT TTAAAGTATA      720
TAATTCATG GCATTAATTA CAGTCACAGT CTTTACAAAC TATTATTACT ATGTATTCTT      780
AAAGTTTTTT TACCCTCCCC CCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:866:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAAT GGCTTCAGTA AGTTAGGATG AAAAATGAAA      60
ATATAAAATA AAGAAGAAAA TCTCGGGGAG TTAAAAAAA ATGCCTCAAT TTGGCAATCT      120
ACCTCCTCTC CCCACCCCAA ACTAAAAAAA GAAAAAAGG TTTTCTAATG AAAATCTTTA      180
AAAATACTGT CAGTATTTTA AAATTTTCAA CAGTATTATA AAAACATTGC ATCTCCCCAC      240
CTCTAATATG CATATATATT TTTCTGCTA AAATTGGTTT CTACAATTGA GTAAATGGCA      300
AATACATGAA GCAATGTCCC TAAATTTTAT AAAGAAATTA TATTTAATGC ACATTCTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:867:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 880 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAAAA    60
CAGTCTTTTA ACCTTTCAAA ATGCCACAAT GTGCATTTTA GATTGCCCTT AGTTTCCCAA    120
CTCTCAGTAT ATAGAGACTC AATTAGAAAA GAAATGGTGC TAGTAGCTTC AACCCACTGG    180
TATGTATTTG AGGAACTGTT CCTGGTAGAA GGCAGTACCG TGTCCCTTGG TATTGCTACT    240
GTGCCTGCTA TGTTACTTCT TTATGTATAT GATATGGAAG TAACTCCTTT TATACATGTG    300
GAGAAGTTTC ACAGCTTTT TCCATAGTCA TTGCATTAAA ATGTCTGCTG AGGCTGGGTG    360
TGGTGGCTTA CGCCGGTAAT CCCAGCACTT TGGGAGGCCA AGGTGGGTGG ATCACCTGAG    420
GTTGGGAGTT CAAGACCAGC CTGACCAATA TGGTGAAACT CCTCTCTAC TAAAAATACA    480
AAAATTAGCT GGGTATGGTG GCGCACACCT GTAATTCCAG CTCGCCCGG GCGACTCGAC    540
CAAAGAGGCC GGAATTTGGC CCTCGAAGCC AAGAATTCGG CACGAGGGGT ATTTTATTT    600
TTANTTNTTC TGTTTCTCTC TNGAGTGTAT AGTGTAGAGG GGGTTTCTGT CTTGAGTGTA    660
GGCCTGGAGA TTCCCTTAT ATGGTACAAA CCAGCAATGA ATTAAGAGGT CTCTTTTCTC    720
CAAGATCTAG TGTTTGTAC TAGGAGAACT CTAAAAAGTA TCTATTTTAC TGTAGTGCCA    780
AAGTACAAAT TTATTTGGAT TTATTTTGTG CCATCTTATT TTTTAATATA TTTCTTTTTC    840
TATGTTGTGC TTCTTTCCCA CCTCATCTCT CCTCCTCGAG    880

```

(2) INFORMATION FOR SEQ ID NO:868:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

```

GAATTCGGCC TTCATGGCCT AGTCATGGCT TTAGAATCTG GAGAAGAGTC TGACTCACTT    60
CTTTCCTGAG GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGATCC CGAACGACTT    120
CTCTGCCCCA GGGGAGTCCG AGCCACAGTT TTCTGATCAA CTGATGATTC TGACCCGCTT    180
CTTCTCTCTT GGGGGGTAAG ACACCTGTTG TTGAGCTCTG GGGATGATGG AGAACGACTC    240
CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTTCTGGGG AAGAATCACA TTCGCTTCTC    300
CCTCTAGATG GCGTTCTAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC    360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:869:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 529 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

GAATTCGGCC	TTCATGCCTA	GAGGATCTTC	TCCTGACCCA	GCATCGCTCA	TCACAATGAA	60
GAACCAAGAC	AAAAAGAACG	GGGCTGCCAA	ACAATCCAAT	CCAAAAAGCA	GCCCAGGACA	120
ACCGGAAGCA	GGACCCGAGG	GAGCCCAGGA	GCGGCCCAGC	CAGGCGGCTC	CTGCAGTAGA	180
AGCAGAAGGT	CCCGGCAGCA	GCCAGGCTCC	TCGGAAGCCG	GAGGGGGCTC	AAGCCAGAAC	240
GGCTCAGTCT	GGGGCCCTTC	GTGATGTCTC	TGAGGAGCTG	AGCCGCCAAC	TGGAAGACAT	300
ACTGAGCACA	TACTGTGTGG	ACAATAACCA	GGGGGGCCCC	GGCGAGGATG	GGGCACAGGG	360
TGAGCCGGCT	GAACCCGAAG	ATGCAGAGAA	GTCCCGGACC	TATGTGGCAA	GGAATGGGGA	420
GCCTGAACCA	ACTCCAGTAG	TCAATGGAGA	GAAGGAACCC	TCCAAGGGGG	ATCCAAACAC	480
AGAAGAGATC	CGGCAGAGTG	ACGAGGTCGG	AGACCGAGAA	GCCCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTCGGCC	TTCATGCCT	AATTTGAGCT	TCAAGTCTCC	ATGTGTATAA	TGTGGGGTTG	60
ATGCTGTGGT	GCTCCAAGGT	GTGGGGGGT	TTTAGGCAGA	GTTCTTATGC	TTAATATAGG	120
ATGGAAAAGT	GTTTCGAGCTT	CTCCCTTTT	CTCTTCTTC	TCTTCATCTG	ACATGAGCCT	180
GGGGTTCTAC	CTCTTCCAGA	TAATTCATCC	TGGAGCTACT	AATTCTATCT	CCCCATTGAT	240
TTTAGTGTCC	TGTCTGTTT	TAAATCTACT	GGGCAGTTGG	AGACATTGTC	TTTGTTCCTC	300
TCATCTATCT	TCTGTATCCA	CAGTTGATAA	TTGTCTATGT	TTTAGTGTG	TTTAAAGGAA	360
ACTAGTCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCGGCC	TTCATGCCT	AGGTGGTGGG	TGCCTGTAGT	CCCAGCTACT	TGGGAGGCTG	60
AGGCAGAAGA	ATTGCTTGAA	CCCGGCAGGC	AGAGGTTGCA	GTGAGCTGAG	ATCGTGCCAC	120
TGCACTCCAG	CCTGGGTGAC	AAGAGTGAGA	CTCTGTCTCA	AAGAAAAGAA	ACAAAAAATT	180
ATGTACACAA	ATATGGACAG	CACTGGCAAG	AAGTGTGGCA	AAAACACATG	TGGTCTCTT	240
GTTTGGGGCT	CAGACATGTG	GCTGTGCCAT	TACAGACCCC	CGGGATTTAG	AATCCTCCTT	300
CTGAAAGGCG	TCCTGTGCAC	TCGTGAGCAC	CAGCCTGAAC	AGATGAAAAG	GCTGAGCTGG	360
AGGGGCTGGG	ACACAGCCCA	CCTTGACGAC	AGCTGCTCCT	GGCTGTGCGG	GGGGGTCTCC	420
AGGAAAGGCC	ATTCTCCAC	TAGGATCGCC	AGGCCCTACT	GAGGCTCAAG	CTCCTTTGCT	480
GTTTGGAATC	TTCCTTCCC	AGCCCCCAG	CCTCATCAA	GGCTGCCTTT	TCCTGTTTCC	540
TGACCACAGC	TGCTTTGACT	CCATTAGCCT	CGAG			574

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GAATTCGGCG	TTCATGGCCT	ACCAGACTAC	TACGGACTCA	TCTAACAAAA	CAGCACCGAC	60
TCCAGCATCC	AGTGTACCA	TCATGGCTAC	AGATACAGCC	CAGCAGAGCA	CAGTCCCCAC	120
TTCCAAGGCC	AACGAAATCT	TGGCCTCGGT	CAAGGCGACC	ACCCTTGGTG	TATCCAGTGA	180
CTCACCGGGG	ACTACAACCC	TGGCTCAGCA	AGTCGCAGGC	CCAGTCAACA	CTACCGTGGC	240
TAGAGGAGGC	GGCTCAGGCA	ACCCTACTAC	CACCATCGAG	AGCCCCAAGA	GCACAAAAAG	300
TGCACACACC	ACTACAGTTG	CAACCTCCAC	AGCCACAGCT	AAACCTAACA	CCACAAGCAG	360
CCAGAATGGA	GCAGAAGATA	CAACAAATTC	TGGGGGGAAA	AGCAGCCACA	GTGTGACCAC	420
AGACCTCACA	TCCACTAAGG	CAGAACATCT	GACGACCCCT	CACCCCTACAA	GTCCACTTAG	480
CCCCCGACAA	CCCACTTCGA	CGCATCCTGT	GGCCACCCCC	AACTCGAG		528

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC	TTCATGGCCT	AAGCTGCACA	AAACGTAGAA	AGAAGACATA	GCGCCTGCCA	60
GGGGAATAGG	AAATGAGGGC	ACTTACACAT	TAATGTGAAT	TAGTAATTGT	GGTATAGAAA	120
TGTTTATAG	TGAAAGATT	AAATTGCTT	TTCAAGAAAA	ATGCCAAAAG	CTATTTAAAT	180
AATTCGAGGT	TACATCGTAG	GTTTTGATT	TTCTCAATTT	AAGATACAGA	AATACAGCAA	240
GCCTTAATAT	AAAGTTTCCT	AAAGTTTCTT	CAAGTATTTT	TAAAGGTGGA	GAAATGCAGG	300
AATTGTATAA	CCAGAATTGT	TTCTGCCTTT	AGCTTTTCAG	AACTTGAGAT	GTGGCAGCAC	360
TGGACTGGGT	TTTTTTAAAT	GTTAGGACTA	GGAATGTTTG	CTCTTGTTAA	TTATGAATTA	420
ATTGATTATT	AAGTTTAGAA	TGCATTTTAA	CAAGTATCTA	ACTATCAAAT	TGTGTTTAGT	480
AACTTGAGTG	TATGCACAAG	TTTGATCAAC	AGCAAAATAG	AGTTTCTGAAT	TTCTTTTAAA	540
GTGATGATAT	ATTATTTTGT	GAAACTTGT	GTTTGAAAAT	GTTTATTCT	GTTTATGGTG	600
TAATACTCGA	G					611

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTCGGCC	TTCATGGCCT	ACGAGCGGTG	AAGGAGGAGA	CCAAGGAGGA	TGCTGAGGAG	60
AAGCAATAAA	TCGTCTTATT	TTATTTTCTT	TTCCTCTCTT	TCCTTTCCTT	TTTTTAAAAA	120
ATTTTACCCT	GCCCCTCTTT	TTGGTGTGT	TTTTATTCTT	TCATTTTAC	AAGGGACGTT	180
ATATAAGAA	CTGAACTCAA	CATTGAGGTT	GTTTTTTTTT	TTGTTTCTAA	GTTTTTGCCC	240
TATTGAAGAT	GACTTCAGAA	AATCCATTCC	CCAGTCATGA	AAATGTACTG	TGCTATTCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

GAATTCGGCC	TCATGGCCTA	ACGGCAGCGG	CAGCCTCTGA	AAAGAATCGG	GGCCCAAGAA	60
AAGGCGGTGC	TGTTATCGCT	CCCAGGAAGG	CGCGCGTCGT	GCAGCAGCAA	AAGCTCAAGA	120
AGAACCTAGA	AGTCGGAATC	CGGAAGAAGA	TCGAACATGA	CGTGGTGATG	AAAGCCAGCA	180
GCAGCCTGCC	CAAGAAGCTG	GCACTGCTGA	AGGCCCCAGC	CAAGAAGAAA	GGGGCAGCTG	240
CCGCCACCTC	CTCCAAGACA	CCTTCCTGAG	GACGCTGGCC	CCAGTGCAGG	CCAACATCCC	300
ACCCCTTACC	TCCATATGGG	ACCTTGCAAG	TCATCCCACT	TCCTCGAG		348

(2) INFORMATION FOR SEQ ID NO:876:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

GAATTCGGCC	AAAGAGGCCG	GAATTTGGCC	CTCGAAGCCA	AGAATTCGGC	ACGAGGAGAC	60
TATTTTCCAT	TTCACACAAG	AAATCTTTGA	TTATTCAGTA	AAAAGAGGAA	ATATAAGAAA	120
AAAAATCAGA	CTAGTCTGGC	CAACATGGTC	TAAAAATACA	AAATTAGCCA	GGCATGGTGG	180
CGGGCGCCTG	TAATCCCAGC	TACTTGGGAG	GCCCAAGCAG	GAGAATCGCT	TGGACTCGGG	240
AGGCGGAGGT	TGCACTGAGC	CGAGATCATG	CCACTGCACT	CCAGCCTGGC	AGACAGAGCA	300
AGACTCCCTC	TCCAAAAAAG	TTAAAAAATA	AAAAGAAAAA	AAAGGCCGGG	TGCACTGGTT	360
CGGCCTCCCA	AAGTGGGGGG	ATTACAGGCG	TGAGCCACCA	TGCCCGGCCA	CTTTCTGTAT	420
TTTTTAATAA	ATAAGAAATA	CACATTTAGT	AGTAGTTACA	AAGATCTGTA	GGCCGTAGCA	480
AATATTCAGT	AACTGGAAGA	TGCCAATGAA	CATTGTTGGG	TAGTATTTAA	ATAACAAAAT	540
GTTCAAATAT	TTGACAAGAT	TAACAACACT	ACACGGCCTT	CTCGAG		586

(2) INFORMATION FOR SEQ ID NO:877:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

GAATTCGGCC	AAAGAGGCCG	GAATTTGGCC	CTCGAAGCCA	AGAATTCGGC	ACGAGGGTAA	60
TTTTAAAAAT	TTATGTATTT	TCTAGCATTT	GCCTCAAGGA	TTGAAATTTT	TTTTTTTACT	120
TGTGTTTACA	GGTAGAATTC	TTTATTTAAA	AAGTCAGTTG	AATATCAAAA	CTATTTGATA	180
TTCTTCAGAC	TGGAATATTA	TTCTCTAGTG	TAGAAGAAAA	CATTTTCTGC	TTACAAAACA	240
AATAGTAAAT	ACTCTAAAAT	AGGGGTGGC	AACTTTTCT	TAAATAAAAAG	GCCAGATGGT	300
AACTATTTTA	GGTTTTGTGG	GCCATGTGTT	GATAACTATT	TTAGGTTTTG	TGGGCTACGT	360
ATGGGGTCAC	TCTCCATTTC	TCTCTCTCTC	TCTCTCTCTC	TCTCTCTCTC	TCTCTCTTTC	420

TGTGTGTGTG AGCGGCGCTC TCGAG

445

(2) INFORMATION FOR SEQ ID NO:878:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

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GAATTCGGCC AAAGAGCCGG AATTTGGCCC TCGAAGCCAA GAATTCGGCA CGAGGGGGTC      60
TCCATTCCCC GAGAAGCCAG GGGCAGGGTG GGATGGGGAA GACCAGGAGC AGAGTCGAGC      120
CTCACAGAAG CCAGCGCGGG TCTCTGCTCA GCACCCAGC CGGGGCTCTG GACCCAGGGT      180
AACAGCCCCA GTTCATCCCA ACCCCTCTCA GAGCCTCAAG AGGGGTAGCT CGGCTGCCCG      240
AAGAGAGGGG TGCCCTATCC CTGCAACCC CTCCACGTAG CGTACCCAG CACCTGCCAC      300
CGCCTTTGCC ATTTCTTTGA GTTTGAAGTT AACTCTCTTA GAGTCTAACT TTGGTTTCATT      360
TCTGCACAGG TACAATAGAT GCTTTATTT GTTTAAATG TTTAATATAT ATACATACAT      420
ATATATATAT TTGTCTGTAA GAATTATGTT TTAAACAGCT GCTGTAGAGT ACCTTTTTTT      480
AAGTAAATCT TACAGTGGAG TATATTTTTT AAAGCACAAA ATTGGTGCCA AGACTGGGTG      540
AGAAATGTAC ATTACCCCTT TATTATTTTG CGTCGGATTC CTCGAG                      586

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(2) INFORMATION FOR SEQ ID NO:879:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

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GAATTCGGCC AAAGAGCCGG AATTTGGCCC TCGAAGCCAA GAATTCGGCA CGAGGGGAAA      60
ATCTTGTCCT AAAAATATAT GAGTTTGGGG GTAAGGGGTG GGATAGCCAA GCAAAATCAG      120
TAATTATTTT AAAATGAACA TATGAATTTT TATTAACCTT TAGTTAAATA CAGATTTTAC      180
AACGAGGTCA GCATAAGCCT AAATCTATAT AGAGGGCTAA CTCAGGCATT GTCTTGTTTA      240
TTTGTAAGCT GGATTAAAAA CAACCTGTCC TGTTTTGTCA GTTCCAGCT TCTTCGTTTA      300
GAATAAATTA GACCAAAAGA AGAAACGTGC TTGTCTCTGT ATACCCGCAG AATGAAGTTA      360
CTGTGTGTTA AACCGGATT TTTCAATTTA CTAGGTTCCG CTCTCTCCCT CGAG              414

```

(2) INFORMATION FOR SEQ ID NO:880:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

```

GAATTCGGCC AAAGAGCCGG GAATTTGGCC TCGAAGCCAA GAATTCGGCA CGAGGGTAAT      60
TTTAAAAAAT TATGTATTTT CTAGCATTTG CCTCAAGGAT TGAAATTTT TTTTACTT      120

```



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GTGTTTACAG GTAGAATTCT TTATTTAAAA AGTCAGTTGA ATATCAAAAC TATTTGATAT      180
TCTTCAGACT GGAATATTAT TCTCTAGTGT AGAAGAAAAC ATTTTCTGCT TACAAAACAA      240
ATAGTAAATA CTCTAAAATA GGGGTTGGCA AACTTTTCTT AAATAAAAGG CCAGATGGTA      300
ACTATTTTAG GTTTTGTGGG CCATGTGTTG ATAACATATT TAGGTTTGT GGGCTACGTA      360
TGGTGTCAAT CTCCTATTCT CTCTCTATCA CCTACCCTCG AG                          402

```

(2) INFORMATION FOR SEQ ID NO:881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

```

GAATTCGGCC AAAGAGGCCG GAATTGGGCC CTCGAAGCCA AGAATTCGGC ACCAGGGGCC      60
GTTTTTTTTT TTTTTTTTTT TTTTTCNNG NNAGGCTTTC CCAGGTGAT TTTAATTGC      120
TATTATAAAT AAATATCCAT TTTTCCATA AAATATTGCT ATATGTTAGT ATATTAATCT      180
TGTACTGTTA CCTTTTCAA CTCTATTGGT TCTGATAGCT TGTCAATTGT CTACCTTTCA      240
TCTTCTAGGT AAATATTCT TACAAATAAT GAGATTGCT CCTACTTCC AATTATCTC      300
ATTACTTTTA CTNNTCTTAC TGCACTGGCT AGGACACCAC TACCTTCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

```

TTTTTTTTTT TTTTAACTT AAAAATAGTT GTATTTATAT TCCACAATTT GTTCAAATAC      60
TGGTTTTCTT ATAACTTTC TACAGGATGT TTTTAAACAA ATTCTTCACA TTGTGTTTTG      120
ACTATGTAAT TGCGGAATT CAGGGAAATA GTTCTGTGTA TTTTAAATAG CTTAATTTGT      180
ACTAAAGGGA TGGTAGGTGG TCACATGCAG TCCATGTGGG ATTCTAACAT GACATTTAGT      240
GAGTTTTCTG ATGTGGACCA TCCCTTTGAT GCTGAAGGTA ATGCATCTGT TGAAAGAAGT      300
GACTGTAGAT TTGGATTACT GCTCTCTGCA TCTCCCTCTT TTCTGCTCGA G              351

```

(2) INFORMATION FOR SEQ ID NO:883:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

```

GAATTCGGCC TTCATGGCAA GAAGGAGNCT TAGCATCAAA CTTTGGAAAG GGAAGCCAGA      60
GAAAAAGGTA GAATGGACAA GTGACACTGT GGACAATGAA CACATGGGCC GCCGTTTCATC      120
CAAATGCTGC TGTATTTATG AGAAAACCTCG GGCCTTTGGC GAGAGCTCCA CGGAAAGTGA      180

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TGAGGAGGAA	GAAGAGGGCT	GTGGCATACA	CACTGTGTAC	GTGGCCACCG	CAAAGGACGG	240
GTTNTGCAAC	CCTAGGACCG	ACCCCCACCA	CCCTTCCCCA	GCTCCTGACC	NTTCCCAGCC	300
CCCTCCAGGG	CCAATGCAGC	ACTAAATCCC	TCTCTCCTCC	AGCATTTCCTG	TGTCTGTCTG	360
GCCCTAAATG	TATCCATGTG	GCTACTTCTC	CAGCCCCCTC	CTTCCCTNTC	TTCTGCCTGA	420
TAGAGGGAAG	AGGAAGAGGA	GGACGAACAG	AGATCCTGAA	ATTCTGACTT	GCTGCTATTC	480
CAGAACCCAG	CCTCCTGGGT	TTCCCCAGTC	CTCATTTTTC	CTCCCAATAC	CCACCCTTCT	540
CTCTCGAG						548

(2) INFORMATION FOR SEQ ID NO:884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

GAATTCGGCC	TTCATGGCCT	AAAAAATACA	AAAAATTAGC	CGGGCGTGTT	GGCGGGCGCC	60
TGTAGTCCCA	GCTACTTGGG	AGGCTGAGGC	AGGAGAATGG	CATGAACCTG	GGAGGCGGAG	120
CTTGCACTGA	GCCGAGATCG	CGCCACTGCA	CTCCAACCTG	GGAGACACAG	CGAGACTCCG	180
TCTCCNAAAA	AAAAAAAAAA	AAAAAAACAC	ACTTGTCTTA	CAAAGACTAA	CAAAAGATAC	240
AAAATAAAAT	AACTTTACAG	CATCATTAGA	AAGCGAACAA	AATCCTAAGA	TAGATACATT	300
TATCTTTCTT	GTTTTAGAAC	TTTTTCTGTG	TAATGGAATG	GAAATGCTTA	ATCTTGTTTC	360
AATGTTTTCA	GTGTTGTGTC	TTGTCAAAT	TGAGGTGGA	TGTTAAAGCC	CTTACTACTG	420
TATTATACAA	AGCAGCGAAC	CTCGAG				446

(2) INFORMATION FOR SEQ ID NO:885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

GAATTCGGCC	TTCATGGCCT	AGCCGGCGCC	GCCGNGTCTT	CCCGGTCTCC	TTTCCCGGCC	60
GCACAGGGTT	TTATAGGATC	ACATTGACAA	AAGTACCATG	GAGTTTATG	AGTCAGCATA	120
TTTATTGTT	CTTATTCCTT	CAATAGTTAT	TACAGTAATT	TTCCTCTTCT	TCTGGCTTTT	180
CATGAAAGAA	ACATTATATG	ATGAAGTTCT	TGCAAAACAG	AAAAGAGAAC	AAAAGCTTAT	240
TCCTACCAAA	ACAGATAAAA	AGAAAGCAGA	AAAGAAAAAG	AATAAAAAGA	AAGAAATCCA	300
GAATGGAAC	CTCCATGAAT	CCGACTCTGA	GAGTGACCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

GAATTCGGCC	TTCATGGCCT	AAAAATCTAA	ATTAAGTAT	GAATAATTTA	AAACAGAATT	60
TCAACATTGA	GACAATGTAG	AGATATATTA	TGGTATAAAA	TGAAGCATT	GCACGAACCT	120
TTTAGCTAAA	ATTTGTTTCA	AAGAAGTTGC	TTTTGTTTTT	AGTGACCTT	GAGTTCAACA	180
CAGATGTGAA	TGCCCCGCTT	TTCCAGAAGG	GTTCTTGGGA	GAAAACACTG	GAGAAGTTCT	240
AAGCACTTTT	TTTTTTTTTT	TTTTTTTTTT	TTTTTTTAGA	GATGGTTTCT	TACTCTGTTG	300
TTCAGGCTGG	AGTGCAGTGT	TGCAATCATA	GCTCACTGCA	GCCTTGACCT	CCTGGCCTCA	360
AGTGATACCC	CTGTCTCAGC	CTCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:887:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

GCCCCAGTCT	AAGGCATTTA	AAATTAAACA	GCTCTTCAAC	GCCCCAAGTT	ATTTTCATCAG	60
GCTAAGAACT	TCTCCGAGAA	ACGCACAAGA	AGGCAGGCAA	ACAGGTGGGT	AGGTGAGAGG	120
TCACGGGGCT	CCATCTGCAA	GCTCCATCTA	CAAGGCATCA	ATCTGCGTTG	TGGCATCAAC	180
GTTAAAATGT	TCTACAGCTT	AGGGATCTTC	TTGAAGCAAG	GTTCCAAGCA	CAAACTAGT	240
ATGACCGGAG	GCTCAATTTA	GAAGATGCAG	CATCTGAAAA	CCTTTACCCC	AGGAAAGGAG	300
GGGTGCCTGC	TGGCATTCAT	GGGCTCTGGA	ACAAGCATT	ATTCAAAGCT	GATGGCCCT	360
CGAG						364

(2) INFORMATION FOR SEQ ID NO:888:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

GCACCCCCAA	ATGCCAGCCT	CTCCTTTCTT	CCCATCCACC	AGTATACTGC	GGGGCCATT	60
CTGGTCTTTG	TCCAACAGGA	AACCCATTTT	TGGTGGGATA	TGCCTTCCAG	TGCCACAGGG	120
CCACTCACCC	CATGCATCTC	TGTCTGCCCC	GTCAGTGCTG	GGACGGACAG	CAAGGGCAAG	180
CCCAGTGTCT	GGCGGATAGG	TGGGTGGGAA	CAGAGAGGGG	AGAATGCCGT	CCTAAGCTTC	240
TGCTTGGGGA	TCCCCACAC	GACCTGGGTA	CTGCCTGGGA	AACCTGTCCT	AAGTAAACT	300
ATGGACCTCG	CCTCGCCAC	CGGCCTGCGA	AGCCAGCATC	TCCGTGAAGG	TGGATGGAAG	360
CGCCTTTGTC	CTCATTTTGA	GCTGCAAGCT	GGGTCAGCGG	CTCTGAAGCC	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:889:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

GTAGGCCATG	AAGGCCGAAT	GGAAAAAGTC	AGTTAAAGAG	GACTCAGTCC	CCACAGGTGC	60
GGAGGAGAAT	GTGGTGTGTG	AGTCACCACT	AGAGATTATA	AAGTCCAAGG	AAGTAGAATC	120
AGCCTTACAA	ACAGTGGACC	TCAACGAAGG	AGATGCTGCA	CCTGAACCCA	CAGAAGCGAA	180
ACTCAAAAAG	GAAGAAAGCA	AACCAAGAAC	CTCTCTGATG	GCGTTTCTCA	GACAAATGAC	240
ATCAGACTCC	ACAGAAAAGA	CTATCACACC	GCCAGAGCCT	GAACCAACAG	GAGCACCACA	300
GAAGGGTAAA	GAGGGCTCCT	CGAAGGACAA	GAAGTCAGCA	GCTCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:890:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 719 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

G:ATTTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGGATGCT	CTGGGTTTGC	TGTAGTCGTC	60
TGTTACTGGT	CNTGTTAGGA	GGAGGGCCAG	GGGGACCCCC	ACCTGGGGCA	GTCCCTTCTG	120
TCCCTTCAGC	AGGTGGCTGA	GCTGGAGCAG	ACATTTTCT	GACAGAGAGA	GTGAGGGTCT	180
GTTCCCTCTC	GGAGGCTGCG	GCGAGACACC	CGGCGAGGGA	CGCTGCGGCT	GAAGTGGACG	240
GAACTGCCAA	GCTCCGCCTC	GCGCCGACTA	CCCCGCGGTC	TAGCTGCGCT	GGGGTTTCAC	300
CATGTTGGCC	AGGATGGTCT	CGATCTCTTG	ACCTTGATG	CTGCCTGCCT	CGGCCTCCCA	360
AAGTGCTGGA	ATTACAGGTA	TGAGCCACTG	TGCCTGACAC	CTGTCAAATT	ATTTTACTGT	420
GTTTATTTAC	CATGTTTCTT	TCACTGTGGG	GTCTCTGTCC	TTGCTGTTTT	GTTTTTCTTT	480
TAACTTCTTT	TGTTATTTAG	GAAGGTTTAT	ATTAATATTT	TAATCTTACA	TGGATAAATT	540
CCTATATCAA	AACTATTGTT	GACAATCAGT	TACAGATGGA	ACTTCGTCTA	CTCTTTCTCC	600
CCTTCTCACT	CCTGCTCTTT	CTCCCTTTCT	CACTCCAGCA	GTTGACTAGT	CTCATTGAAA	660
AAACAAATTG	GGGCCGGCCA	GGCATGATGG	CTCATGCCTG	TAATCCCAGA	CAACTCGAG	719

(2) INFORMATION FOR SEQ ID NO:891:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

GAATTTCGGCC	TTCATGGCCT	AGATACTCCG	CTGAAGATCT	GATGTCACCC	CAAATGCATG	60
GCTCCAGCCT	CAGTTCAGCT	TTCCACACTG	CTTGACAGAA	TTCCCTTCATT	TATCTTGAGT	120
TTCTCCTCTC	ACTCCCATGG	TAGCTTTTCC	ATTCCCCTG	CCTCTTCTCA	CATTTCAAGTA	180
GATGAGAATA	GAAGCCATAG	GAAGCAAAC	TCTTCAACCT	CCAGCCAACC	GCCGAGCGAT	240
GGGCATCTCT	CGGGACAAC	GGCACAAGCG	CCGCAAAACC	GGGGGCAAGA	GAAAGCCCTA	300
CCACAAGAAG	CGGAAGTATG	AGTTGGGGCG	CCCAGCTGCC	AACACCAAGA	TTGGCCCCCG	360
CCGCATCCAC	ACAGTCCGTG	TGCGGGGAGG	TAACAAGAAA	TACCGTGCCC	TGAGGTTGGA	420
CGTGGGGAAT	TTCTCCTGGG	GCTCAGACTC	GAG			453

(2) INFORMATION FOR SEQ ID NO:892:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC	TTCATGGCCT	ACCAGCCTCT	GGGCTGAGGC	AAAGACCTCT	GAGGCCCCGT	60
CCACCCAGGA	CCCCTCCACC	CAGGCCTCCA	CTGCGTCCTC	CCCAGCCCCA	GAGGAGAATG	120
CTCCGTCTGA	AGGCCAGCGT	GTGTGGGGTC	AGGGACAGAG	CCCCAGGCCA	GAGAACTCTC	180
TGGAGCGGGA	GGAGATGGGT	CCCGTGCCAG	CGCACACGGA	TGCCTTCCAG	GACTGGGGGC	240
CTGGCAGCAT	GGCCACGTC	TCTGTGGTCC	CTGTCTCCTC	AGAAGGGACC	CCCAGCAGGG	300
AGCCAGTGGC	TTCAGGCAGC	TGGACCCCTA	AGGCTGAGGA	ACCCCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

AACAGGAGAT	GGACAAGCTG	AAGGAGCAAT	ATGATGCTGA	GTTGCAGGCC	CTGAGGGAGA	60
GTGTGGAAGA	AGCAACCAAG	AATGTTCGAG	TCTTGGCGAG	CAGGAGCAAC	ACTTCAGAGC	120
AAGACCAGGC	GGGGACTGAA	ATGCGCGTGA	AGCTTCTGCA	GGAGGAGAAT	GAGAAGCTGC	180
AGGGAAGAAG	CGAAGAGCTG	GAGCGGAGAG	TTGCTCAGCT	TCAAAGGCAG	ATCGAGGACC	240
TGAAAGGCCA	TGAAGCCAAG	GCGAAGGAAA	CGCTGAAGAA	GTACGAGGGA	GAAATACGAC	300
AGTTAGAGGA	GGCCCTTGTC	CACGCCAGAA	AGGAAGAAAA	AGAAGCTGTG	TCAGCCAGAA	360
GGGCCCTGGA	GAATGAACTG	GAGGCTGCTC	AGGGAAATCT	GAGTCAGACT	ACCCAGGAGC	420
AGAAGCAGTT	GTCTGAGAAG	CTCAAAGAGG	AGAGTGAGGC	GCTCGAG		467

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GAATTCGGGC	TTCATGGCCT	ACTCAGCTTT	CCTGGTCTCC	CATCTGAACT	GCTTCTTTGT	60
GCACCTCTTG	TTCTTTCTCT	TGGCTCCCAG	TCTTGATTCC	TGTGATCACT	CTTGCATCAC	120
TAATTGCACA	AGTGATTCA	GGTGCAATTC	TGATTAGCCT	GCGTCCACAC	AGTGATCGAT	180
GATCCTATGT	GCCTAGAAAG	GACACTGTGT	GCTGCTCATG	ACCTGCAACA	GGAAAAAAGC	240
CATTCTTGT	TAGCAGTGTA	AGAACCTTAG	AGCAAAGGAG	TTGACCTTCT	GATTGAATAT	300
AAGCACAACC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```

GGGCTTAGTT AGGAGCTATG GCTAAACATC ATCCTGATTT GATCTTTTGC CGCAAGCAGG      60
CTGGTGTTGC CATCGGAAGA CTGTGTGAAA AATGTGATGG CAAGTGTGTG ATTTGTGACT      120
CCTATGTGCG TCCCTGCACT CTGGTGCGCA TATGTGATGA GTGTAACATAT GGATCTTACC      180
AGGGGCGCTG TGTGATCTGT GGAGGACCTG GGGTCTCTGA TGCCTATTAT TGTAAGGAGT      240
GCACCATCCA GGAGAAGGAC AGAGATGGCT GCCCAAAGAT TGTCAATCTG GAGGAACCTG      300
AG                                                                                   302

```

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```

GAATTCGGCC TTCATGGNCT ANTCTCATTT NAAATATATC CTTACTGAAA CATCTGGAAT      60
AACGTCTGAC CAAATATCTG GGTACAGTGA TCCAGCCAAG TTGAGACATG AAATTAATCA      120
CCATGGCCTA CATTTTATC TGTTTGGCTG CAATTCTGTC AAAGGCTTCT GCTCTTCATA      180
ACATTTCAC TACTAGCTCC ATGAAGCCAT ATGATACAAA CCTTGCCTGT GTAGCCTTCA      240
CTTTTTCCTA AAAGAAGTCT ATTAAATGCC AATCAAGTAT CTTCTCCTCC AAGCTCAGTA      300
GCTCGGGCCT TCAACAGCTG TTCCCATTG CGATCCATCT CCCTGAGCTA CCCTGGCATT      360
CTTATCAGGA CACTGGAGGA ATCTATGTAT GTGCCTCTAA AGATTCAGCA CCCAAACATG      420
ATAGAAATCA CTGTGTTTAC ACTGTATCTC TATATCTGCC CATCCCGCTC GAG                   473

```

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 594 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```

GCTCGAGTGA AGTGGTATCT CATTGTGCTT TGGGTTTTAA TTTTATAATA TTTTAATTTT      60
TAAAATCAAA AGAATATACT GGGGCTGGGG TGGTGGCTCA AGCCTGTAAT CCCAGCACCC      120
TGGGGGGCCA AAGGGGGTGG ACCACCTGAG TTTATGAGTT CAAGACCAGC CTGGCCAACA      180
CGGTGAAACC CCATCTCCAC TAAACATACA AAACCTAGCC GGGTATGGTG GCAGGCACCC      240
GTAATCCAG CCTCTCAGGA GGCTGAAACA GGAGAATCAC CTGATCCGGG AGGTGGAGGC      300
TGCCATGAGT CAGAATCACG TCACTGCACT CCAGCCTGAG AGGAGACCCG TACAAAAAAA      360
AAAAAAAAAA ATATATATAT ATACACACAC ACACACACAC ACAAGGATT TAGATTGAA      420
AATGATGTTT TTTACTCATT TCAAAATGTA CTGTAACCTT TCTTTGGTTC TTACTGTTTT      480
CATTTAACTT TCTCTGTTTT CAAGAAAAAT TGTCTTTATT GACATTTGTA AAAAAGAATG      540
TGTTTTGCCC AGTTATTAAG TATTTTATTT TTATGCAATT TCAGAACACT CGAG                   594

```

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

GAATTCGGCC	TTCATGGCCT	ACTGTACATT	TTTTTTAAAG	TTTGTGAAA	AGAATATTGT	60
CTTATTCTAT	AAAACATTTC	AAACCTAGTT	AGAGATTGT	AATCAAAAAA	CATTTCGCGA	120
GAAAGCAGCA	CTTAGGGCTG	CCTGTTCTAT	ACCCTACAGT	CAGACAGGAA	AAGAAGTGAA	180
AATGGCACCC	TTCTGACATT	CTGAGGCAGC	TGGACTGGCA	GCCAAGTAAA	GGAGAGTGAT	240
GAGGTGGTGT	GGGGAGGGTG	GGGAGGCAGC	GCGAGGGTGC	TCTCCACAGG	GTAGGTCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 475 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

GCGGCCTTCA	TGGCCTAGTG	CTTGTCAGTT	TGGAAAGTCA	CAGGGAGTTT	ACCATTCTAT	60
AATTAGAGTA	GGAGGAAAAT	GAGAACCAC	TGGTAGAAGA	AGAAGCAACA	GTCTTCTAGG	120
GTCTGGCATT	TGATGAGATA	GGTATTCAGT	TACTGTGCAT	TTCCATTGTT	TTTCCATGGC	180
AGAACATACG	GCAGAGATT	GGGAAGTCGC	ATGCCTGAAG	CCAGGTTATT	CTTATGTTCT	240
GTAAGTATGT	TGCTCGCAGG	GCTGTTGTTG	TCAGAGTAGT	GAGTTGTGCC	CCAGACAAAT	300
GGGGTGCTGG	TCTGCTCCCA	CAAATCTTTA	TCCAGTCTT	CATCGCAAGG	AGGGCACTGC	360
CAAGTGCTCT	CAGCCAGAGT	CTCTTGCTTA	AGGCTCCTGG	TTTGGTTGAC	AACATCTTGC	420
TCAATACAAC	TTCTGTCATC	ACAGCTTGAG	ATATGATGAC	TAATTCAGC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 507 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

GAATTCGGCC	TTCATGGCCT	ACAGCTGCCT	TTTTCTTTAA	AGGGGTTCTT	GTCTTCTGGA	60
ATTCCTTTTA	CTAGAGGATC	CTCTCCAGAA	CGTTCTTCAA	TATAGTTCTT	TATTTCTTCA	120
GAACATTTAG	ACACTTGTTG	TCTCTGCAAC	TTCACTTCTT	TGCGAAGCTG	CTCAACTTCC	180
ATTTTCAGTT	TTTCCTTCTC	TGGCAAATCT	TCGATGTGAA	GGGCAGGCAT	TTTCGCCCCA	240
GAACCGGGCT	CAGGCTAGCT	CTGGCAGCGG	AGCCGCTGGA	AGAGCGGCGA	AGCTCGGCGC	300
GTCCCGAAAC	AACTGAAGGC	CTGGCCCGCC	GCCCAACCGC	GCAGGATGTG	ACTGCAGCCC	360
TGCTGCGGTC	CCCAGCTCCC	CGAGGGCTTG	GCTTTCTCCG	GGACGCTTGT	CACGCCAGCG	420
TGCCCCAGCT	TCCTAGGACC	TGAGAACTCT	GCCTTTTCTC	AAGTCCCTGC	AACCCAGGAG	480
GCCTGCCCCG	GTGCTAGTAG	GCCATGA				507

(2) INFORMATION FOR SEQ ID NO:901:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 495 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

```
GAATTCGGCC TTCATGGCCT AGTTTGGATT TTCATATTAG GGATACTCAA CTGGTATTAT      60
TATTCTGGCC CCTGCAAATT TTTCAGTAGG TCCCCTAGTA TGTCATGCCA GGGACTATGN      120
GAGTTCTGG  GAATAGCACT GTAANACATT CTTGAGTGGG TCCTTGACTC CATTGAGTTT      180
ATAATCTCGT AGGAGGAAGG CTATGAAGAA TTCTAATAAA GCAAAGCAAG CAATCACAAC      240
AAACCTTCCT CTTAACTTA TCAAAAATGG AAACCTTGAA GAGCTGCTCT TTAATAAATC      300
ATTGGAAAGC ACCAGGACCC AGGTGTTTTG ACTCAGCCTC ATTTCAGACT GAGATCTGAG      360
GCCATGATAA CTCATGTGCC TATATATGCT GATAATCACC ATTACCTATA CCATTCTTTA      420
CATTCTCTCA TCTACACAAT CATCTTCAAC TCTCTCAT CCACTTCAGC GATTGAATTC      480
TTTACCGGCC TCGAG                                     495
```

(2) INFORMATION FOR SEQ ID NO:902:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 266 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

```
GAATTCGGCC AAAGAGGCCT AGAATCCAG ACCTAGCTCA ACCCATGCCT CTTTCCTTC      60
CTTCCCTCCT TCCTTTCTTT CTTTTCTCTT TTCTCCTTCC CTCCCTTCTC CTTTCTTCC      120
TTCTCTCCCT CTTTCTCTTT CTCCCTTCTT CTTGCTCTTC CTTCTTCTC CCCTCCCTCC      180
CCTCCCTTCT TTCCTTCTC CTCTCCCTTC CATTCTTTCC TCCCCACCC CCCGTTTCTT      240
CTCTTTGGAG AGATGTACAG CTCGAG                                     266
```

(2) INFORMATION FOR SEQ ID NO:903:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

```
GAATTCGGCC AAAGAGGCCT AAATGAGAGC TGAGTGAAGT GGATGCCCCCT TATAAAAACA      60
TCAGATCTCG TGAGAACTTA CTATCACTAG AATAGCATGG GGGAAACCACC CCATGATTCA      120
GTTACCTGCC CCCAGGTCTC TGCCACCACA CATGGGGATT ATGGGAACCTA CAACTCAAGA      180
TGAGATTTGG GTGGGGACAC AGGCAAATTA TATCAGCTGT TGTGCTCATT AGTTTGATA      240
TCATCCTTGG CTCCTTAGC ACTATAAGGG CAGGATTGAG TCCTTGCAAC AGAAACCATT      300
CAGCCTGCAA AGCTGAACCT ATTACTTTC TGACCCTTA TGGAAAAGTT TACTGATCTC      360
TGGACTAGAC AGTTTTTTAA AAATGACATC TTATGACCGG GATTCTCGAG      410
```

(2) INFORMATION FOR SEQ ID NO:904:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

```
GAATTCGGCC AAAGAGGCCT AGCCGAGACT CTGTCTCAA AAAAAGAAAA AAAGCTGCTT    60
TGGGTCTTAT GAGGGAGGGG ACTGGGAATC TAGGTGTTTC AAGCGCCCCA GGCGATTCTT    120
AAGGTCACAC AAGCTTGGGA GACACTTCAT TAAGCAAAAT CTTTGGCCG TTTTGTCTG    180
GTTGAGCCTC AGTGTCTATT CATTGAGTGG TCACCAAGAG TTTGGGTGG ACTGATCATC    240
AGCATTTACA GGTTCGAAA TTGAATTAG TTTTACTACT CAGAGCTTAT TAGACTTGAG    300
CAGATTTAAA CGGAAGGACA CTCGAG                                     326
```

(2) INFORMATION FOR SEQ ID NO:905:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

```
GAATTCGGCC AAAGAGGCCT AGGAACTGTT TTGACCCTGA AGGCTATTTA ATCCACTGTC    60
CCCTACAAGG CCTACAAGT GCTGGGGGAA AAAAAACAGC AATGAGGATG ATCCTGAGTT    120
AATGTGTATG CTCCCAAGA GAGCTTGCTT ATACCTTGAT TATTCATAA AATCACATGT    180
TAATACATTG CTTTCAGAA GAAATACTGA CTTGATCTGA TAGGAGAAAA TGGTAATATT    240
TCATAGTTGT TTTCCAAAG CAAATTTAAA TGTTGTCTGT TATCTCCTTA CTTAGTTTAA    300
GAATTTAGTT TTGAACCCCA TTGACTTTGT CATTGCAAT TTAAAAATA TTTGGGACTG    360
GGCATGGTCG CTCACGCCTG TAATCCAGC ACTTTGGGAG GCATCTCGAG                                     410
```

(2) INFORMATION FOR SEQ ID NO:906:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 498 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

```
GAATTCGGCC AAAGAGGCCT ACGCTTCCCG GGTTCACGCG ATTCTCCTGC CTCAGCCTTT    60
TGAGTGGCTG GGAATACAGG TGGATGCCTC CATGCCTGGC TAATTTTTTG TATTTTAGTG    120
GAGACAGGGT TTCACCGTGT TGCCCGGGCT GGTCTTGAAC TCGTGAGCTC GGGCAATCCA    180
CACTCCTTGG CCTCCCAAAG TGCTAGGATT ACAGGTGTGA GCCACTGCAC CCGGTCGAGG    240
TACAGTTTTG AAGTTCATGC AAATCTCATC ATTTGCTCTT CTGCAACAAA ACATTTTCTT    300
TCAACTTATT TTGCCTGTGT GAAGCTCAGT GCTTTAACTC ATATATGGAG TTATCTTCTT    360
CCCTCAGACT GGAGACGTTG GTGAAATTGG GGCTAGACTG AAGATGTCTA AGGTGGCTTG    420
ATTGACAAAG GTCTCTCCTC ATCCCAAAA TAAATAACAT TTTTTCATTT ATAATAGTAA    480
TACACCAGTC GACTCGAG                                     498
```

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

```

GAATTCGGCC AAAGAGGCCT AACTGGTGC TGGTTTCACA TCACGACAGC AACGGGATTC      60
TTTTGCTTTG AAAATGTTGC AGTCCACCTG TCCAACCTGA TCTTCCGGAC ATTGACTTGG      120
TTTCTGGTTA TCCACCATCT CTTTGCCCTT CTGGGGTTTC TTGGCTGCTT GGTCATCTC      180
CAAGCTGGCC ACTATCTAGC TATGACCACG TTGCTCCTGG AGATGAGCAC GCCCTTTACC      240
TGCCTTTCCT GGATGCTCTT AAAGGCGGGC TGGTCCGAGT CTCTGTTTGG GAAGCTCAAC      300
CAGTGGCTGA TGATTCACAT GTTTCACATG CGCATGGTTC TAACCTACCA CATGTGGTGG      360
GTGTGTTTCT GGCACCTGGG CGCCTGGTTC AGCAGCCTGT ATCTGCCTCA TTTGACACTG      420
TTCTTGCTCG GACTGGCTCT GCTTACGCTA ATCATTAAAT CATATTGGAC CCAGACTCGA      480
G                                                                                   481

```

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 764 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

```

GAATTCGGCC AAAGAGGCCT AGAAACAATG GTTTTCAGAC ACTGAAAGTT CATAGTACAG      60
GACTGTGATC TCTGCGAGAA GGGGGAATAA TGAGGTGAGT CCAGTGATTG CTCAGGCGAA      120
TGGCCTGGAG GCAGTTTCTA-GGCAGCAAAG CAGGGAGAGG GAAGCCAGAG ACCAGTGGTC      180
CTGCTGTGTT GAGGAGATGG AGATCAGTGT CACCGGAGGC CAAGGTGAGT AAGTGAGAGG      240
AGAGGAGGCA GCAGCACACA GACAGAGAGT GCTGTAGATC TGCAGTGGGT CCCCTGGAGT      300
CCTTGGTTGA GTGAAGGTGT TAGAAGAAAC TACTTAAGCC AAGAAATGAG TAACTGGAAA      360
TTAGTAGAGC AAATAATTTA CAGATCATCT ATGGGGCTGG GAAAAGTTG TGTTTCCACT      420
AGCCAGAGTA GAAATAACTC ATAATGCATG GGTATCAGG TGGAGTCCTC CAACAGGTGT      480
TGCCTTAGTA CTGAGGTCAA ATTGTCCCTA GACCAAAGGC TTCTTTGGAC TTCCCTAAC      540
AAAGCTTAAA GACAAGCCTT GGAAGGATCA AACTAATTTT AAGAACTTA ACTGTGAATC      600
AGAATAAAAC CCAATACCAT TTATAGGAAT ATAACAAAAT CCATCAACAN ACNACATAAC      660
ACTCATAATT ACCAACATTG AGTAAAAAAT TACTGGAAAC AGAGAAATAT AAATTATGGC      720
CCATAATTAG GAAAAAAGGG TAATCATTAG AGGTAGAACT CGAG                                764

```

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

GAATTCGGCC	AAAGAGGCCT	ACTAAGGACT	TGTTTCGGAA	GGAGCTGACT	GGCCAATCAC	60
AATTGCGAAG	ATGAAGGCTC	TGTGGGCCGT	GCTGTTGGTC	ACATTGCTGA	CAGGATGCCT	120
AGCCGAGGGA	GAGCCGGAGG	TGACAGATCA	GCTCGAG			157

(2) INFORMATION FOR SEQ ID NO:910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

GAATTCGCGG	CCGCGTCGAC	AGAATAGACC	TGGTTTGTGA	ATTATGGCCT	GGATTTCACT	60
TATACTCTCT	CTCCTGGCTC	TCAGCTCAGG	GGCCATTTCC	CAGGCTGTTG	TGACTCAGGA	120
ATCTGCACTC	ACCACATCAC	CTGGTGAAAC	AGTCACACTC	ACTGTCTGCT	CAAGTACTGG	180
GGCTGTTACA	ACTAGTAACT	ATGCCAACTG	GGTCCAAGAA	APACCAGATC	ATTTATTAC	240
TGGTCTAATA	GGTGGTACCA	ACAACCGAGC	TCCAGGTGTT	C TGCCAGAT	TCTCAGGCTC	300
CCTGATTGGA	GACAAGGCTG	CCCTCACCAT	CACAGGGGCA	CAGACTGAGG	ATGAGGCAAT	360
ATATTTCTGT	GCTCTATGGT	ACAGCAACCA	TTGGGTGTTT	GGTGGAGGAA	CCAACTGAC	420
TGTCCTAGGC	CAGCCCAAGT	CTTCGCCATC	AGTCACCCTG	TTCCACCTT	CCTCTGAAGA	480
GCTCGAG						487

(2) INFORMATION FOR SEQ ID NO:911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

GAATTCGCGG	CCGCGTCGAC	AGTTACTGAG	CACACAGGAC	CTCACAATGG	GATGGAGCTA	60
TATCATCCTC	TTTTTGGTAG	CAACAGCTAC	AGGTGTCCAC	TCCCAGGTCC	AACTGCAGCA	120
GCCTGGGGCT	GAGCTGTTAA	AGCCTGGGGC	TTCAGTGAAG	TTGTCCTGCA	AGGCTTCTGG	180
CTACACTTTC	ACCAGCTACT	GGATGCACTG	GGTGAAGCAG	AGGCCTGGAC	AAGGCCTTGA	240
GTGGATTGGA	ATGATTCATC	CTAATAGTGG	TAGTACTAAC	TACAATGAGA	AGTTCAAGAG	300
CAAGGCCACA	CTGACTGTAG	ACAAATCCTC	CAGCACAGCC	TACATGCAAC	TCAGCAGCCT	360
GACATCTGAG	GACTCTGCGG	TCTATTACTG	TGCAAGGGAC	AGCTCAGGCT	ACGACTATGC	420
TATGGACTAC	TGGGGTCAAG	GAACCTCAGT	CACCGTCTCC	TCAGCCAAAA	CGCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGCGG	CCGCGTCGAC	CCAGGATGCC	GCGCAGCAGA	GCTCTGATTC	TGGGGGTCCT	60
CGCCCTGACC	ACCATGCTCA	GCCTCTGTGG	AGGTGAAGAC	GACATTGAGG	CCGACCACGT	120
AGGCACCTAT	GGTATAAGTG	TATATCAGTC	TCCTGGAGAC	ATTGGCCAGT	ACACATTGTA	180
ATTTGATGGT	GATGAGTTGT	TCTATGTGGA	CTTGATAAG	AAGGAGACTG	TCTGGATGCT	240
TCCTGAGTTT	GGCCAATTGG	CAAGCTTTGA	CCCCCAAGGT	GGA CTGCAAA	ACATAGCTGT	300
AGTAAACAC	AACTTGGGAG	TCTTGACTAA	GAGGTCAAAT	TCCACCCAG	CTACCAATGA	360
GGCTCCTCAA	GCGACTGTGT	TCCCCAAGTC	CCCTGTGCTG	CTGGGTCAGC	CCAACACCCT	420
CATCATGCTC	GAG					433

(2) INFORMATION FOR SEQ ID NO:913:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 139 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

GAATTCGCGG	CCGCGTCGAC	GCAAGATGGA	TTCACAGGCC	CAGGTTCTTA	TATTGCTGCT	60
GCTATGGGTA	TCTGGTACCT	GTGGGGACAT	TGTGATGTCA	CAGTCTCCAT	CCTCCCTGGC	120
TGTGTCAGCA	GGAGAGAAG					139

(2) INFORMATION FOR SEQ ID NO:914:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 166 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGCGG	CCGCGTCGAC	ATCATGGCTA	CCCTGCGTGT	CCCACTCCTG	GTGGCTCTCG	60
TCCTTCTTGC	TGTGGCAATT	CAGACCTCTG	ATGCAGGTCC	CTATGGTGCC	AATGTGGAAG	120
ACAGTATCTG	CTGCCAGGAC	TACATCCGTC	ACCCTCTGCC	ATCACG		166

(2) INFORMATION FOR SEQ ID NO:915:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 590 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

GAATTCGCGG	CCGCGTCGAC	TTCTTGGGCA	GCACAGAAGA	CAGAGCCGAT	TTTGACCAAG	60
CTATGTTCCC	TGTGATGGAG	ACCTTCGAAA	TCAATGATCC	AGTGCCCAAG	AAGAGAAATG	120
GGGGGACCTT	CTGCATGGCA	GTCAATGGCA	TCCACCTGAT	CCTGCTCAGC	GCAGGTACTG	180
CAGTCTGCT	GATTCAAGTT	CTCAATCTGC	AGGAGCAGCT	CCAGATGCTA	GAGATGTGCT	240
GTGGCAATGG	ATCACTAGCT	ATCGAGGACA	AGCCCTTCTT	CTCGCTGCAG	TGGGCACCCA	300
AAACACACCT	GGTACCTAGA	GCACAGGGGC	TGCAAGCCTT	GCAGGCCAG	CTCAGCTGGG	360

TCCATACCAG	CCAGGAGCAA	CTCCGTCAGC	AGTTCAACAA	CCTCACTCAA	AATCCAGAGT	420
TGTTCCAGAT	TAAAGGTGAA	CGAGGCTCTC	CAGGTCCAAA	AGGGGCCCCG	GGTGCTCCTG	480
GAATCCCCCG	GCTGCCTGGG	CCAGCTGCTG	AGAAGGGAGA	AAAGGGGGCT	GCAGGTCGTG	540
ATGGAACCCC	AGGTGTCCAA	GGACCCACAG	GCCCACCAGG	AAAATCTGAG		590

(2) INFORMATION FOR SEQ ID NO:916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

GAATTCGCGG	CCGCGTCGAC	GGAAGAGCAA	TGAAAACATA	TGCTCCTACA	TTATTCATGT	60
TTCTATGGCT	GCAGCTGGAT	GGGATGAGCC	AAGGTGAGCA	GGTGGAGCAG	CTTCCTTCCA	120
TCCTGAGAGT	CCAGGAGGGA	TCNNGTGCCA	GCATCAACTG	CACTTATGAG	AACAGTGCCT	180
CCAATACTT	CCCTTGGTAT	AAGCAAGAAC	CTGGAGAGAA	TCCTAAGCTC	ATCATTGACA	240
TTCGTTCAA	TATGGAAAGA	AAGCAGACCC	AAGGACTCAT	CGTTTTACTG	GATAAGAAAG	300
CCAAACGTT	TCCCTGCACA	TCACAGACAC	CCAGCCTGGA	GACTCAGCCA	TGTACTTCTG	360
TGCTGCAAGT	GAGAGCACCA	ATACAGGCAA	ATTAACCTTT	GGGGATGGGA	CCGTGCTCAC	420
AGTGAAGCCA	AACATCCAGA	ACCCAGAACC	TGCTGTGTAC	CAGTTAAAAG	ATCCTCGGTC	480
TCAGGACAGC	ACCCTCTGCC	TGTTACCCGA	CTTTGACTCC	CAAATCAATG	TGCCGAAAC	540
CATGGAATCT	GGAACGTTCA	TCACTGACAA	AACTGTGCTG	GACAATCTCG	AG	592

(2) INFORMATION FOR SEQ ID NO:917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

GAATTCGCGG	CCGCGTCGAC	GAATGAGGTG	CTCTCTTCAG	TTCCTGGGGG	TGCTTATGTT	60
CTGGATCTCT	GGAGTCAGTG	GGGATATTGT	GATAACCCAG	GATGAATCT	CCAATCCTGT	120
CACTTCTGGA	GAATCAGTTT	CCATCTCCTG	CAGGTCTAGT	AAGAGC		166

(2) INFORMATION FOR SEQ ID NO:918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

GAATTCGCGG	CCGCGTCGAC	GTCTGAGAGG	AACCCCTTCT	TGAGGATGGA	CACTTCTCAC	60
ACTACAAAGT	CCTGTTTGCT	GATTCTTCTT	GTGGCCCTAC	TGTGTGCAGA	AAGAGCTCAG	120
GGACTGGAGT	GTTACCAAGT	CTATGGAGTC	CCATTGAGA	CTTCTTGCCC	ATCAATTACC	180

TGCCCCCTACC CTATAGTGAG

200

(2) INFORMATION FOR SEQ ID NO:919:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCGCGG CCGCGTCGAC CCAACCTTCC GGAAGCCTCC CCATCAGCAC CATGAACCCA	60
AGTGCTGCCG TCATTTTCTG CCTCATCCTG CTGGGTCTGA GTGGGACTCA AGGGATCCCT	120
CTCGCAAGGA CGGTCCGCTG CAACTGCATC CATATCGATG ACGGGCCAGT GAGAATGAGG	180
GCCATAGGGA AGCTTGAAAT CATCCCTGCG AGCCTATCCT GCCCAGTGT T	231

(2) INFORMATION FOR SEQ ID NO:920:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCGCGG CCGCGTCGAC GTTTTGTAT TGTTACGAAG TAAATGATTC GTATGCTGTA	60
CATAGCTGTT ATAGAAGTGG CGATTAGTGT AATTAGTAGG GCTCAGGCTC TCGAG	115

(2) INFORMATION FOR SEQ ID NO:921:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GTTGAATTCT AGAAATCAAA ATTAATTGA CAAAGGAAAA GCAGATGCCG GAAACTTCTT	60
CCCAGTCTGT CATACAATTC ACCACTGGCC AGGTGCTGAG AGAAGCATTA GGGAACAGTG	120
TGGGTTGTGT CAGAGTTGGA CGGCTCCATC CCTTTGGCTT CATTATCTTC CTCCTCATGG	180
AGATTCTAAA GCAACCCGTC GACGCGGCCG CGA	213

(2) INFORMATION FOR SEQ ID NO:922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GAATTCGGCC	AAGAGGCCTA	CTTAGAAGCC	AAAGAAGGAG	ATTTGCACAG	GATAGAAATC	60
CCATTCAAAT	TCCACATGCT	GCATTCAGGG	CTGGTCCACG	GCCTGGCTTT	CTGGTTTGAC	120
GTTGCTTTCA	TCGGCTCCAT	AATGACCGTG	TGGCTGTCCA	CAGCCCCGAC	AGAGCCCCCTG	180
ACCCACTGGT	ACCAGGTGCG	GTGCCTGTTT	CAGTCACCAC	TGTTCCGCAA	GGCAGGGGAC	240
ACGCTCTCAG	GGACATGTCT	GCTTATTGCC	AACAAAAGAC	AGAGCTACGA	CATCAGTATT	300
GTGGCCCAGG	TGGACCAGAC	CGGCTCCAAG	TCCAGTAACC	TCCTGGATCT	GAAAAACCCC	360
TTCTTTAGAT	ACACGGGCAC	AACGCCCTCA	CCCCACCCG	GCTCCCACTA	CACATCTCCC	420
TCGGAAAAACA	TGTGGAACAC	GGGCAGCACC	TACAACCTCA	GCAGCGGGAT	GGCCGTGGCA	480
GGGATGCCGA	CCACCAGACT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

GAATTCGGCC	AAAGAGGCCT	ACATTCATCA	AGTCATCCAA	CTTCTATAGT	CAAAGCAGGA	60
TCATGTGGCG	AAGCATATGC	TCCACAAGGG	TGGATAGCTT	TTTTCATGGA	ATTCTCGAG	119

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

GAATTCGGCC	AAAGAGGCCT	AAAGAGAGTG	GAGGAGGAGG	ACAAGATTGA	TACTATGAGA	60
GTTGGAGGAC	ATAATTCATG	GATCATAGCT	CCAGAAGTGA	AAAGGGAGGA	AATGTAGACA	120
GAGGAAGGCA	TTAGCCATTG	AGAAGAATAG	GGACATATT	TCTTTACTCT	CTGTICAGAG	180
GAAGATAGCT	GGGGGAGTAT	AGACAAGTTG	TAAGAATGAA	GGAAGGAAGG	CAAGAGCAGA	240
CTTGTCGGAT	GAATTTTATT	TTCTCTATGA	AGTTTGAGAA	TTAAACTTTA	TGCTGAGAAG	300
GAGGGCAGGA	GAGACTGTAT	ATGGAATGTA	AGGTTTGGA	TAACCAATGT	AAGTTTGGG	360
AATGAGAAAG	CCACCTAGGG	ATGAGGAAAA	AATATTTAAA	ATTTTGTATC	CACTGAAAAAT	420
TCTTCAACAG	TGTAAAATGA	AGCATGCTCA	ACTGGAATG	GTCATATATC	TAAAAGAAAA	480
TGGATTTATT	TGTATTATTT	TCTCTATATT	TGTAGTATTT	TACAGTAAGC	ATGTATTACC	540
TTTATAGTGA	AAAAGTGTCA	TTTTTTTACA	TTGGTCAATT	TTTTGTTATT	AAATTTTCATG	600
CTTGTTTTTA	ATTGTTTCTT	GTGTGTATGA	TTGCAATATC	AGGTATTGTA	TGTGTTGATG	660
TGTGTGATTG	AGAAGTCAGA	AGACTTAAGT	TCCGACACCC	CTCGAG		706

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

```
GAATTCGGCC AAAGAGGCCT AGGATTCAAA TTATTCTGAC AGACCTGTGT GGCAGTTCAG      60
GCTGATAGCT GGAGTTTCTT GTCTTTTCTT ACATGGCCTT TCATCTTCCA AGAGTTAGAC      120
TATGATTCTT CACATCATGA TGGCTTAGGG TCCCAAAAAG AAAAGAGTAG AACTTGCAAT      180
ACCTCTTAAG CCCTATGCCC AAGAACTCAT ACAGTGATAC TTCTGCCACC TTGTGTTAGT      240
CAAAGCAAGT CACAAGGCCA GCCAGATTCA AAAGAATGGA AAAATAGACT CAATTTCTCTG      300
GTGAGAAGTA GCAAGGTCAC ATTGCAAAGG AGTCTGGACA TGGGAAGGAG TTACTCATTT      360
GTGGCCTTTA TAATAATCTT CCACAAATGC CTGTAATTTG GGCAGTGTGC TTAGTACTGG      420
TGATAGAAGA TAAGTAGCTT ATTTCAATAT CTTAATTTTG TTTTATATAT TTGATAATTT      480
TATGATGCAG GTTCACTGTG CACTGGTATC AATCCCAGGG GAGGACTGTA AACACCTTGC      540
CAATACTGTG TACCAGTA.C AATCCACTGG CATGAGTCTG GTGAGACAGA ACACACAATA      600
AGTTTAGGGA AGCAACTTTA TTACTCACAG ACAGGCAGCA AGGGACTCGA G      651
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(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 700 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

```
GAATTCGGCC AAAGAGGCCT AAAAAGATGA AAGGACCAAT CAAAGATTTA ATTAAAGCTA      60
AAGGGAAAGA TTTAGAGACA GAGAATGAAG AAAGAAATTC TAAGTTGGTG GTGGACAAAC      120
CAGAACAGAC AGTGAAGACC TTTCCACTGC CAGCTGTTGG TTTGGAAAGA GCAGCTACTA      180
CAAAGGCAGA TAAAGACATC AAGAATCCAA TCCAACCATC CTTCAAAATG TTAATAAATA      240
CTAAACCAAT GACTACTTTC CAAGAAGAAA CCAAGGCTCA GTTTTACGCA TCAGAGAAAA      300
CCCTCCTAAA AGAGAACTTG CCAAAGATTT GCCTAAATCA GGAGAAAGTC GATGTAATCC      360
TTCAGAAGCT GGAGCGTCTT TACTGGTTGG CTCAATAGAA CCTTCTTTGT CAAATCAAGA      420
TAGAAAAATAT TCCTCAATTC TACCTAATGA TGTACAAACT ACCTCTGGTG ATCTCAAATT      480
GGACAAAATT GATCCCCAAA GACAGGAAAT TCTAGTAAAA TTACTAGATG TGCCTACTGG      540
TGATTGTGAT ATTTCTCCAA AGAATGTCAG TGATGGGGTT AAAAGGGTAA GAACATTATT      600
AAGCAATGAG AGAGATTCCA AAGGCAGGGA TCACCTCTCA GGAGTCCCTA CTGATGTTAC      660
AGTTACTGAG ACTCCAGAAA AGAACACAGA ATCCCTCGAG      700
```

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

```
GAATTCGGCC AAAGAGGCCT AGGGGTGGTG GAGGCGTGGG CCCAACGGTG ACCGTCGGGA      60
TGGAGCAAGG GCAAGGAGAG GCTCTGGCCC AGACACAGCT TGGAAAAGCT CATCTCCCTC      120
TGGGGTTTAA AAACCTCAAAG CAAACGGAGC AAGCCTGGCG GCCCTGGGGA TGGGGCAGGG      180
```


CCTCTACCTC	ACTGTGATCT	TCGACCTGGC	GACACAGGAC	AGCCACACAG	AAGCACGCCA	240
ACACACTTAA	AGCTTTGCTC	CAACTAAATC	ATTTAGTTTC	CCTTGAAGAA	ATAACTGAAA	300
AAAAAAACAA	CTGCTGACAT	CTATGTCTGT	AGCTCGATTT	TACAGTCTGC	TCTTTGTGAG	360
AAAGGAAAAT	CACTCGAG					378

(2) INFORMATION FOR SEQ ID NO:928:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 426 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

GAATTCGGCC	AAAGAGGCCT	AATATTTAC	ATTCTCTTT	TCTAAAAGTG	TAAATTTTTC	60
ACTTTAAAAT	GAAGCAAGAA	TTAAATAAAT	AGAACAAATA	CCATATATCA	TCACAGAGTC	120
AATATATTAT	GGTCCTGTTT	TGACCAAGTG	TTGCATTGTA	TTTGTGTAC	CAGAACTGCA	180
GGGCTTTCTA	TGGCTACATG	GTCAGTGCAT	GCTCAGACAG	CTGTTAAAT	CAAAACCTTC	240
ACTGTGCTGG	GTCACCTGGT	AACTACTGTC	TATCTCACAA	GTGCATTCTG	CTGACATTCA	300
AGGGTTAAAC	TGGTTTCTAG	TAAATACTGT	GCTTTAAAGT	AGTACATACT	GTGAGCTGTG	360
TTATTAGAAA	CCTGCTTGTC	CTTGTGTCTG	AAAATAAGGA	GGAACACTCT	CGCACCAAAT	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:929:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

GAATTCGGCC	AAAGAGGCCT	AGGTAAATGT	TAGTGGAAAA	TTTTATGAGT	ATATGCTGAA	60
AGGAGAGATT	AGTTCACATG	AACTCAATAA	TGTTCAAGAT	AATGAAATGC	TTAGAAAGGT	120
TACTTTTGAT	CCAGAAGTAT	TTTTCAACAT	ATTACTTCCT	CCTATCATAT	TTTATGCAGG	180
TTATAGCCTG	AAAAGGAGAC	ATTTTTTTCG	AAATCTTGGG	TCTATCCTAG	CATACGCTTT	240
TCTTGGAACA	GCAATTTCTT	GTTTCGTTAT	TGGGTCAATA	ATGTATGGCT	GTGTAACGCT	300
GATGAAGGTA	ACGGGACAAC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:930:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

GAATTCGGCC	AAAGAGGCCT	ATGGACACCC	TGTGCCCCAA	GCCGATGGCC	CCACCCAGCA	60
GCATCAGCAC	AGNTGCCCCC	CTTCTCCGCA	GAGCAGGCTC	TCCTTTACGG	GACTCTCCTC	120

```

TTCCTCCCA CCTGATGCGC ATCAGCAGCC ACGGGCCTGG CCCTTGAATC TTGTCTAACT 180
GCACTCGCTG CCTGGTGGCC TCATCCCACC CCAAGACCAC TGCACTGATG GCTCCAACCC 240
CAACTTCTCC CTGCACTCAG CTTATGAATA CGACGGCCCT CATTGCATCC ATGCAGAGAC 300
CTCAGAGGCA GCTCAGCTCA GTGCTCAGCG TGGCACTCGG GGCTTCACAC TTCCCCCGT 360
GTCCTGTCTG AGAAACTGT GACACCATCA ACCCACTAA CTCGAG 406

```

(2) INFORMATION FOR SEQ ID NO:931:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

```

GAATTCGGCC TCATGGCCTA CCAGACTGTA AACATTCCAG GTCCTGAAAA AGTGTGGGAC 60
CAGTCTCCTA CTGTTATGTT CTCCAGTTTT AAAAATGTAA AATCAGTTGA AACACTCGAT 120
CAGAAGGCAG ATGAAGTCTT TGACTGTCTAG AGTAACCAAA ACAGACCAGA TGAATGCAAA 180
AGTGAAGGTC AGTCAGCCAA GGAGATGCTA AGTAGTGACC AGAGAGAGAC TGTCAACCGA 240
CTCGAG 246

```

(2) INFORMATION FOR SEQ ID NO:932:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

```

GAATTCGGCC TTCATGGCCT ACTCCATTGT CACGCCAATT TCCCCTAGTC CAAGTTTTTTT 60
CTTTGCTGAT TCCTTTGTCC ATGTGTGCTT TGAGCCTCTC TCATCTTGTC TTTCTCTCTT 120
TCCTAGGAGC AGCTCCTGAA GCAGCAGCAG CAGCACCAGT GGCAGCAGCA TCAACAGGGC 180
TCTGCCCCCTC CTACCCAGT GCCCCATCA CCACCACAGC CTGTGACCCT GGGGGCTGTG 240
CCAGCTCCAC AGGCTCCACC CCCGCCCCAC AACTCGAG 278

```

(2) INFORMATION FOR SEQ ID NO:933:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

```

GAATTCGGCC TTCATGGCCT ACGAGTGCGA CCAGCCAGAT GAGCGCCCGG TCCTGGTGAA 60
GAGCATTAC TACCTCTACT TCTCCATGAT CCTGTCCACG GTCACCCTCA TCACTGTCTC 120
CACCGTGAGC TGGTTCACAG AGCCACCCTC CAAGGAGATG GTCAGCCACC TGACCTGGTT 180
TACTCGTCAC GACCCCGTGG TCCAGAAGGA ACAAGCACCA CCAGCAGCTC CCTTGTCTCT 240
TACCCTCTCT CAGAACGGGA TGCCAGAGGC CAGCAGCAGC AGCAGCGTCC AGTTCGAGAT 300

```

GGTTCAAGAA AACACGTCTA AAACCCACAG CTGTGACATG ACCCCAAAGC AGTCCAAAGT 360
GGTGAAGGCC ATCCTGTGGC TCTGTGGAAT ACAGGAGAAG GGCAAGGAAG AGTCCCGGC 420
C 421

(2) INFORMATION FOR SEQ ID NO:934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC AAAGAGGCCT AAAATAGCAA AGATGGAACA TGGACCTAAA GCAGTGACTA 60
TTGCAAATTC TCCATCAAAG CCTTCAGAAA AGGATTCTGT AGTTTCCCTT GAGTCCCAGA 120
AGACACCTGC TGACCCAAAA CTGAAAATC TAAGTCAAAC CAAAAAAGC AAAGGATCTG 180
ATAGCTCACT CTCTGGTAAC AGTGATGGCG GAGAAGAATT TTGTGAAGAG GAGAAGGAAT 240
ATTTGATGA TAGCACAGAA GAAAGGTTTT ACAAGCAGTC TTCCATGTCT GAAGATAGTG 300
ATAGCGGTGA CGACTTCTTC ATTGGGAAAG TCAGACGGAC ACGAAAGAAG GAAAGTAGTT 360
GTCATTCTTC AGTTAAGGAA CAAAAACCAC TAGAAAAAGT GTTCTTAAA GAAGATACAG 420
GTGAAACTCA TGGGGATACA ACTCTCGAG 449

(2) INFORMATION FOR SEQ ID NO:935:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

GAATTCGGCC AAAGAGGCCT AAAAATAGTG ATTTTTTGAC TATCTATAGA TATTAGTTGG 60
CATTCTACTG TAAGGAAAAC TTTCTTTTCT CTTGTACTTA TTCATCGTCC CCCAGGAATC 120
AGTCATTTT CCAAGGAGAC CTAGTTCCTT TTTGTAGGA GTTGTTTTGA GTTCATTTG 180
AAGTTCATTT GAAGTTTGA GTTCATTTTA CTATAATCTG CCTAGGTGTG ATTTTCTTTT 240
TATTTATTCT GCTTAGGATT TGCAGAGATT TTTTGAACC TGTGGCTTGA TGTCCATCAC 300
TTTTGGAAAT TTCTCAGCCA GCATAGTATC TGCAGACTGT GTGTCTGTTC CATTTTCTCT 360
CTTTTCTCCT TGTAGGACTT CATTACAAG GATGTTAGAA CTTTTTACCA TGGCTCTCGA 420
G 421

(2) INFORMATION FOR SEQ ID NO:936:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC AAAGAGGCCT ACAGGTCTAC TGGTAATGAT TTCCTTTACC TTCTAATTAT 60

ATAGAAATGT	CATAATTTCT	CCTTTATTCT	TGAATGATAG	TTTTGTGGGA	TATAGACTTG	120
CTGGATATAG	AATTACTGGA	TATAGAATTG	CCAGATATAA	AATTCTTGGT	TCAAAGTTTT	180
TTTTCTTTGA	GGACTTTGAA	TGTCATCCCA	CTGTCTTCTG	GCCTCCATAG	TTTCTCATAA	240
TAAATCAGCT	GTTAATCTTC	ATTAAGTTTC	CTCTGTACAC	GAAGAGTCAC	TTGTCTCTTG	300
CTGCTTTCAA	ATTTTTCTCA	TTTGCTTTGG	GTTTTACAC	TTTAATTATA	TGCCTTTCTA	360
TGTGGATCTC	TTTGAGTTTA	TCCTGCTTGG	AGTTCATTGA	GCTTTTGGCA	TCTGTATATT	420
AATTCTTTTC	ATCAGATTG	GAGATGTTTT	TGGCATTAT	TTCTCAAAG	TTCTTTCTGC	480
TTCTTTCTCT	CCTTCTCCTT	CTGGGTCACC	ACAATGCATA	IGTTGGTCTA	CTTGATGATG	540
TCTCACAGGT	TCCTTAGACT	CTGTTACTT	TTCTTCATAT	TTTTTTCTTT	CTGTTTCTTA	600
AATTGGATA	ATTTGGTTG	TCTTATATTC	AAGTTTGCTG	ATCTCGAG		648

(2) INFORMATION FOR SEQ ID NO:937:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GAATTCGGCC	AAAGAGGCCT	AGAGGATGGG	AAGCTTGGGG	AGAGAAGATA	CTGAAATGCT	60
AGAAACTGAG	CCAGTAGAGG	ATGGGAAGCT	TGGGGAGAGA	GGACATGAGG	AAGGATTTCT	120
GAACAACAGT	GGGGAGTTCC	TCTTTAACAA	GCAGCTCGAG			160

(2) INFORMATION FOR SEQ ID NO:938:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

GAATTCGGCC	AAAGAGGCCT	AGAAAACTC	AGGAAAGAAA	TTGCAGACTT	CGAACAACAG	60
AAAGCAAAAAG	AATTAGCTCG	AATAGAAGAG	TTTAAAAAGG	AGGAGATGAG	GAAGCTACAA	120
AAGGAACGTA	AAGTTTTTGA	AAAGTATACT	ACAGCTGCAA	GAACTTTCC	AGATAAAAAG	180
GAACGTGAAG	AAATACAGAC	TTTAAAACAG	CAAATAGCAG	ATTTACGGGA	AGATTTGAAA	240
AGAAAGGAGA	CAAATGGTC	AAGTACACAC	AGCCGTCTCA	GAAGCCAGAT	ACAAATGTTA	300
GTCAGAGAGA	ACACAGACCT	CCGGGAAGAA	ATAAAAGTGA	TGGAAAGATT	CCGACTGGAT	360
GCCTGGAAGA	GAGCAGAAGC	CATAGAGAGC	AGCCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:939:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGGC	AAAGAGGCTA	GAAGCATCGA	AAGCGTTGGA	GAGGTGTTAC	CGGTAACGGC	60
GGCGAGAAGG	GTGTTCCCGA	ACTAGAGTGG	GGCATAACATA	ATCTTGCTGC	TATGCTTCGA	120
AGCTGTAGTC	TGAATCAACC	TAAGTTTAA	ACAGAAGGTG	AACCTCTGAG	ATAGAAAATC	180
AAGTATATTT	TAAAAGAAGG	GATGTGGGAT	CAAGGAGGAC	AGCCTTGGCA	GCAGTGGCCC	240
TTGAACCAAGC	AACAATGGAT	GCAGTCATTC	CAGCACCAAC	AGGATCCAAG	CCAGATTGAT	300
TGGGCTGCAT	TGGCCCAAGC	TTGGATTGCC	CAAAGAGAAG	CTTCAGGACA	GCAAAGCATG	360
GTAACAAC	CACCAGGAAT	GATGCCAAAT	GGACAAGATA	TGTCTACAAT	GGAATCTGGT	420
CCAAACAATC	ATGGGAATTT	CCAAGGGGAT	TCAAACCTCA	ACAGAATGTG	GCAACCAGAA	480
TGGGGAATGC	ATCAGCAACC	CCCACACCCC	CCCCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:940:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

GAATTCGGCC	AAAGAGGCCT	AAGAAATTAT	ACCATTTTAT	GGAATGTCAA	GCTACATCAC	60
CCGAGAAGAC	CAGTACAGCA	AGCCTCCGCA	CAAAAACTG	AAAGACCGCC	AGATCGATCG	120
CCAGAACCGC	CTCAACAGCC	CTCCTTCTTC	TATCTACAAA	AGCAGCTGCA	CAACAGTATA	180
CAATGGCTAT	GGGAAGGGCC	ATAGTGGTGG	AAGTGGCGGA	GGCGGCAGCG	GTAGTGGTCC	240
CGGAATTAAG	AAACAGAAG	CGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:941:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 535 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

GAATTCGGCC	AAAGAGGCCT	AAGCCTCGCC	TTACACTTAA	GTGCACCCGA	TCCTGCCTCT	60
GGCATCTCAC	AAACGTCACT	CCCTGGAACA	AATTTGTGAA	GGCCTCCAGA	CCACAGTGTC	120
CTCATCTGTA	AAATGGGGGT	AGTAGTAATC	CTTGCCTCAT	AAAGTTCTTG	GCAAGGATTA	180
GATGAGCGAG	CATGTGAGTT	TGGCCTCCGT	TTAAACACTC	CATAAAGTTT	CCTTTTAGGA	240
TAACAGCAGG	CCGTTTTAGA	ACCTTCCAGA	GGTTACTTAT	TCAGATATCC	TTAGGTGACG	300
ATTGGGAAGC	TGCCGTTTCT	TGAGAGCCTC	CTGGGTGACA	GATGGAGAGT	GGCCCTGGCG	360
TGACCCTTGA	CCCTATCCTT	GAGGCTTTCC	TGCCCGTCTC	CTGCCTCGAA	TGTGCTCCGC	420
AGCACATGGA	TCAGGATGGG	GAAGGGGCTG	TGTCACTGGA	TACCTTCGGC	CCCTGCCCAC	480
GTCTAGGGCC	TGTGAAAACG	AGGAGGGACA	GCAAAGAAAT	GGGGAAAGGC	TCGAG	535

(2) INFORMATION FOR SEQ ID NO:942:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

GAATTCGGCC	AAAGAGGCCT	AAAATTGTTA	ATTCTAGTCA	CCCTGCAGTG	CTATAGAACA	60
CTGGAACTTA	TTCCTCCTAT	ATCACCGTAT	TTTTGTATCT	ATTAACAAAC	CTCTCCATAT	120
CCTCCCTCCC	TCCTACCCTT	CCCAACCTTT	GGTAATCACT	ATTCTCCTCT	CTACTTCTAT	180
GAGATCAATG	TCTTTATTTA	CTCGAAGTAC	TCTTAAAGT	TTAGGACTTA	AGTATTTGAA	240
GAAATTCACT	TGCTTTTGT	TTTTATTCTA	CTCAATACTT	TTTAATATAA	AGATTTACAG	300
TCCCCCCTTA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:943:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

GAATTCGGCC	AAAGAGGCCT	ACAAACTCAA	GATGCCCGAG	TGGATTGGAG	GCGAGAGCGA	60
GCTCAGGAAG	TTTCTAAAAC	ATCATTGCG	AGGAAAGAAC	TGTGAACTCC	TGCTGGTGAT	120
ACCAGAAGAG	GTAAGAGGCTC	ATCAGAGTTG	GAGGACCGAT	GTGTAACAGT	TCTGCCCAAC	180
CTCCCTCTCG	CCTCAGCCCC	TTCAGTCCTC	TGTGACGTGC	TGTGGCCTCT	ACAGTGGGTC	240
TGCCCTTGCC	ACTTCCCCAA	ACATCTCATC	AAGTTTTTCC	CCTTCAGATC	TGACAGTGCA	300
ATAGGACAGA	CGTGTGGACT	GTTATAAGAA	CTACTCAGTG	TTTTGTTCCT	GGGCAAACTC	360
GAG						363

(2) INFORMATION FOR SEQ ID NO:944:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

GAATTCGGCC	AAAGAGGCCT	ACTCTGACAG	TGTTTCTGAC	CTTTAGCATT	TCTTTTGTAT	60
TCTTTCTTAG	AATTCTCATC	TTCTGCTTAT	ATACCTGTCT	ATTCTTGCA	GCTGTCTACG	120
TTTCCCATGA	GAGTCCTTAG	CACATTAATC	ATGTTTGT	TACATTACA	GTCTGGTAAT	180
TCCAGCATCC	CTGCCACATC	TGAATCTAGT	TCTGATGCTT	GCCCTGTCTC	TTCAAACCTCT	240
GTTTTTTTGC	CTTATAATCT	TTTGTTGAAA	GCCGAACATG	ATTCCTGTAC	TGGCTCTTCT	300
GGAGGCTTCT	GCCCTGTTCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:945:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 712 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

```

GAATTCGGCC AAAGAGGCCT ACAGATGACT TCATTCTCT TGGATTCCAC TTTCTCACGT      60
GTCAGAAATGG GAGAGGAAGG GAGGTGTTGG GATAAGTTTC AGTTCCACTG TTTGTACTTC      120
TCGTCTGGCT AACACCCATG TGGCAAATAG GTTTCATCAT TTGTTTCAGC TTAGATTTGT      180
TGACAGCGGT TTCCTGGAGT GCTGTCTTGA GAACGATTCT GAGGAGGCTC AGCAAGAAAG      240
AGTGTTCAG TTGATTGGGT GTGTCTGTCA TGGAGAAGGA AGTAAGGAGT GGGCAGTGCT      300
AGCAAAATTC CCGGGGCACT TCTGTCCATT ATCTCAATAC CTGGGGTTGA CATTTCCTGT      360
CTCAGATCAG GAGTCCTGAC TACCCTGCCT CTGACCACTC GAACTGAGTG CTGCTTAGCT      420
GTATCGTAGA CACCGCCTGT TTGTGAACAG ACACCTGCT TCTTGATAAC ACAAAGGCCA      480
GCAGGGTCCA CTGCTGTGTG GAATGGCCTT CCGTCATTTC TGCCAGAGC ATAGAGGTCA      540
TTTTCACTAA TAACATAACT CTCCTTTTGA TTGAAAGTGT TAAAATGTTT CTCCTAAAG      600
CACTTATTTT TTAGGCTCGT TCTTCAGATT TGCCCATAT CCTAAGCAA ATGCCTTCAA      660
TATGAAGTGG ATATTGCTTG ACCGTAGGGA GCTTGTCAT ACTGTACTCG AG              712

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(2) INFORMATION FOR SEQ ID NO:946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

```

GAATTCGGCC TTCATGGCCT AGTCTTGAAG GATAAGACTT GCCCAAGTGG ATAAGGGGCG      60
AAAGGCATCC CAAGAGGAGA CAGTAACGTG TGTATAAATG AACGAAGGCG TGAAATAGGA      120
TGGAGTGTTC TGAGGAACCA CAAGTAGCCT TCTCTGAGTA AGAGCATAGG TTTGTGAGGA      180
GGACCTAGTG TTGTTTGAAA AAAGAGAGTG ATCAATGGAA GATGAGATAT CAAGACAGGA      240
GAACCAAGGA AGAAAAAGCA GAGGACAGCT GGAATGAATC AAACCGAAGA ACCAGGATCC      300
TCGAG                                     305

```

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

```

GGGTTTTGTT AATGGAAAGT TTAAGTAAAT TATATTGTAA TAAAAAGGTA GATAAACCAT      60
TGTACAACAG TATTCTAGGC CGCCAACAAA AGTGTGACAG ACACACTAAA AGCCCTCCAA      120
CTTTAACTTG TAACGTAGCT TCATTCTCAA AGCTGACTCC TTTTTTTTCT TTTCCTTTT      180
CTTGAGTGTA GTACAGTTAA AATTCAAAC AGCTCCTTGA CACTGCTTTT CATGTTCAA      240
CCAGCCATTT TGTGTACTT TGGTAAAGGA CCTCTTCCCC TTCCTCCCCT ACACATACAG      300
ATACACCCAC CATAACTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

```

GAATTCGGCC TTCATGGCCT ACAAAGGCA ACAAACAAGA TTAACATGGA ATTATAAAAA    60
TCACTCAATC CAAAATAAGG CAGAAGAAGT GGAAAAGGGA GATGAAGATC AGATGGAACA    120
AAGAATATTA CTAGAAATGA CTATGTTTTA TAATGCAAAA TAGTTCAGTA CAGGAGAAAG    180
ATACAATAAT TTGAGTGCAT ATGAACITAA AAGAGAATTT CAAAATATAT GAAGCAAAAA    240
TTGACAGAAC CCAAAGGCA ACAAACAAGA TTAACATGGA ATTATAAAAA TCACTCAATC    300
CAATATCTCG AG                                     312

```

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGA GCCTCAAGAA AAATTAGCAG    60
AGGAAAATAA TAGGTAGTTA CTATTTAGGG TAAACTAAAC TGTCTAAGG AATAGAAAAA    120
AAAAATTCCA TGTCTTCAAA AATAATTCTT CCCTCTCAAT CTCTCTGAAT ATCTCATAG    180
AGTATTCAGG CCACAGAAAT AACTACCATT TAGCCACTCA GAGGCTTATA GTAGTTCTAC    240
TAACTTTAAC ATTTGGCAAC CAAAATTACT CTAAGAATCA TCACCCTCGA G          291

```

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

```

GAATTCGGCC TTCATGGCCT AGATGGGCAT TCTGTTTATC TTACTAGTAG TACGCAGGGT    60
ATGTTGAAAT CTCCAAGTGT GATGGTGGAC CTGTCAACTT CTCCCTGTGG TTTTATCAGT    120
TTTTCTGGG TATTTTGAGG CTATTCTGAT AGGTACATAA AATACAAAAA TTGCTATATC    180
CTCCTAATTA ACACTTATTA TCAAATTGTT ACTAATGCTT TCTGTTCTTA GGCCATGAAG    240

```

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:


```

GAATTCGGCC TTCATGGGCT AGATCTGAGC TCACTGCAAC CTCTGCCTCC AGGGTGCAAG      60
CCATTCTCCT GCCTCAGCTT CCCAAGTAGC TGAGACTACA GCGTGTGCC ACCACGTTGG      120
CTAATTTTGG TATTTTGTAGT AGCTTTTTTT TTTAAACCCT GAGTGTGAGG TGTGAGGTAG      180
TAGAAGAAAG GTAGTGTGTG TGACAGCTTG TGAGTACTTA ACTAATTCCT GTTGCATTCA      240
CTATAATATG GTAGTTGTGT ATACATTATAT AGGCAATTAG GAATAGGGAA CAGAATCAGC      300
AGATACTAAC GGAGTTAGAG ATGTTTGCTG AAGTCATGGA AAGCCATCAT TACTTTTTTC      360
TTCCTTCCTC ATAAGGCCTT AGTGGGTGTG GCGTTCAGCT CGAG                        404

```

(2) INFORMATION FOR SEQ ID NO:952:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

```

GAATTGGCCT TCATGGCCTA GA'AAATCAT GTGGGAAAAC CACTGCTGAA AATGGATTTA      60
AATTCAGAAC AGGCGGAACA ACTGGAAGA ATCAATGATG CTCTTTCCTG TGAATATGAG      120
TGCCGCCGAC GAATGTTAAT GAAACGATTA GATGTGACTG TACAGTCCTT TGGATGGTCT      180
GATAGAGCAA AGGTAAAAAC AGATGATATA GCAAGAATTT ATCAGCCTAA GCGTTATGCT      240
TTGTCACCCA AGACAACGAT TACAATGGCA CATCTACTTG CTGCTCGTGA AGATCTATCC      300
AAGATCATTA GGACAAGTAG TGGCACCAGC CGGGAGAAGA CCGCATGTGC CATTAAATAAG      360
GTGCTGATGG GAAGGGCTCG AG                                     382

```

(2) INFORMATION FOR SEQ ID NO:953:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

```

GAATTCGGCC TTCATGGCCT AGTCCCTCTT CCACTGCATT TCGGCTTCAT ACATGCACAT      60
GATGTCCTCC TCCTTGCACT CAGTGATGTC TGGCACGCGG CGGTACTGCC GGTGGTAGTA      120
GTAATACCTG TTCTTTGCGT GCTGCCGCTC TATAAATTCT CTCACGAGGG TCACGGGTGCG      180
GTCCACGATG AGGTCGAACG CTTTCATCAT GTAGACGATG GGATTGGGCT GCACCGGCGT      240
GCGGCGCGGG GGCTCAGGCT CGCTCGAG                                     268

```

(2) INFORMATION FOR SEQ ID NO:954:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

```

GAATTCGGCT TCATGGCCTA AAGATTCTGC TCTTTATACA CAGAACTTGG TATAGAGTTC      60

```

TGGAATGAGG AAGTGTGAGG AGGGAATCAG TSCCTCTCGG AAGTCGTTTT AATTAGAATG	120
TGATTTTTTTT TTCTTAAACG TGTCTTCATT GGCTCCCAGA TTTGCCGTAG AAACCAAGCA	180
AACTGGGTGC TAAAACAGAA AGGCCCATAG ATTGTACTTT TTGAGCTGTT TGAATTTGTA	240
TACCATATGC ACAACTCGAG	260

(2) INFORMATION FOR SEQ ID NO:955:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 129 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

GAATTCGGCC TTCATGGCCT AATCCGAGTG TTTGCGGCAC GTCCTAAGCT GACAGTCCCT	60
CTGGACAGAG TCCCTGGAGT GGAGTCACTG CTCCTTGTCT TTTTTTCATA ACATACACTC	120
ACCCGTATG	129

(2) INFORMATION FOR SEQ ID NO:956:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 404 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

GGCTAAACAT GGAAATGAAA GACTGATACT TGCTACCACA AAAANANACT TAAGCACATA	60
GATCATAGAC AGTATAAAGC AATTAGACAA TGAAGTCTAC AAAACAACCA GTTAACAACA	120
CAATGAGAGT ATCAAAATCT TACATGTCAA TACTAACCAT GAATATAAAT GATCTAAGCC	180
CCCCACTTAA AAAGCATAGA GTGGCAAACCT GGATAAAGAG ATAAGACCCA ACTGTCTGCT	240
GCCTTTGAGA GACCCATCTT GCATGTAGTG ACACCCACAA GCTGAAAGTA ATGAGATGGA	300
GAAAGATCTA TCATGCAAAA GGAAAACAAA AAAGAGCAAG TATCACTATT CTTATATCAG	360
ATAAGACAGA TTTTAAACCA ACAACTATCA AGAAGAACCT CGAG	404

(2) INFORMATION FOR SEQ ID NO:957:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 283 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

GAATTCGGCC TTCATGGCCT AGACTCTCTT TATACAATTC ATCAAGGTTA AACAAAACAT	60
AAAATTCCCT TAAAAATAGG GTAATAAAT AGATGAAATT TGTATCACTC AATTTGGTGA	120
TACTAGTAAA AACTATAGTT CATATTTATA TACAAATAAT ACAGTCTGTA AAAACAGTCT	180
TAGAATTTAA ATAAGCTATC TAAACGTGTT AAAATTTTAA ATCAGGACCT GATTTGTTTT	240
GCTTTCATT AAATGTCACA TTGAATTCTA GACCTGCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:958:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

CTCGAGGACC TGGTCGTGAC CAACTATAAG ATGGGGGGGC GACATTGCCA ATGGGGTACT	60
TGGGTCCTTG GTGGACGCAT CTAGCTCAGG TGTGTCAGTA CTGAGCCTGT GTGAGAAAGG	120
TGATGCCGTG ATTATGCAAG AAACAGGGAA AATCTTCAAG AAAGAAAAAG AGATGAAGAA	180
ACGTATTGCT TTTCCACCA GCATTTTGGT AAATAACTGT GTATGTCCT TCTCCCCCTT	240
GAAGAGAGAC CAGGATTATA TTCTCAAGGA AGGTGACTTG GTAAAAATTA GGCCTCTTGT	300
GCCGAATTC	309

(2) INFORMATION FOR SEQ ID NO:959:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 149 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGACTAC TGCAAGTGCT	60
TAAAGGCATT ATTTCATAGA CCTTACAAC ACCCATATAA CATTATTATC TTCATTTTAC	120
AAATGAGGAT AATAATGTTA TATCTCGAG	149

(2) INFORMATION FOR SEQ ID NO:960:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 455 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

GAATTCGGCC AAAGAGGCCT ACACCGTAAT ACTATAATAC TATATAATCT GTTTGTTAAT	60
TTTCTGAGAA TAATAACTCA ATGGAGTAAC TCTTTAATAG GCATCTTTTC CTTATAAAAA	120
ATATTGTAGA TTGGCTCTCT GCAAGCTAAT TTCTTTTATA TGGTTAATAT TTTAGTGTAC	180
ATTAAGAGCT TAGAGTTCTT TTTGTAATCA AGCTTGCTAC AGAAGCTGTG CTTTATTTAT	240
TTCATAGTAA TTCTCTCTAG TGGGTCATTG TATAAACCCCT GATCATTTT GTATGTCTAT	300
TCCTTTTCTT GCGAAGTGGG CAGCTTGTTT AGCCATGGTG TTTGGCTTC AATAGTGAGG	360
TCTCTATTTG GGAATCTCTG AATTTACAG GAATGAGTAG AACTATATT AACAAATGAAA	420
AAAATAGTAT TAGATTTTAG GGCAGCTGGC TCGAG	455

(2) INFORMATION FOR SEQ ID NO:961:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

```
GAATTCGGCC AAAGAGGCCT ACCCTGTCTT TATGCTCCAA TGCTTCTTTC TCCAGATATG      60
AAAGGAGATG CTCTCTATCA AATGGCCCTG TGGTGGACTT TGATGTCTGG TTCTTCTGCC      120
GGAACCCCTGC TGGCTTTTTC CTGTAGCTCC ACATTCCTGT GCATTGAGGG GTTAACATTA      180
GGCTGGGAAG ATGACAAAAC TCTCGAG                                         207
```

(2) INFORMATION FOR SEQ ID NO:962:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 247 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

```
GAATTCGGCC AAAGAGGCCT ACTGTAGTAT TTAAATATCT GTTACAGGTT TCCAAGGTGG      60
ACTTGAACAG ATGGCCTTAT ATTACCAAAA CTTTATATATT CTAGTTGTTT TTGTACTTTT      120
TTTGCATACA AGCCGAACGT TTGTGCTTCC CGTGCATGCA GTCAAAGACT CAGCACAGGT      180
TTTAGAGGAA ATAGTCAAAC ATGAAGTAGG AAGCCAGGTG AGTCTCCTTT CTCCAGTGGA      240
TCTCGAG                                         247
```

(2) INFORMATION FOR SEQ ID NO:963:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 472 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

```
GAATTCGGCC AAAGAGGCCT ACAAGAACAT GAAACATCTG TGGTCTTCC TTCTCCTGGT      60
GGCAGCTCCC AGATGGGTCC TGTCCCAGGT GCAGCTGCAG GAGTCGGGCC CAGGACTGGT      120
GAAGCCTTCG GAGACCCCTGT CCCTCACCTG CGCTGTCTCT GGTGGCTCCA TGAATAGTCA      180
CTACTGGAGC TGGGTCCGGC AGCCCCCAGG GAAGGGACTG GAGTGGATTG GATATATCTC      240
TGACAGGGGG AGCACCAACT ACAACCCCTC CCTCAGGAGT CAACTCACCA TATCACTAGA      300
AACGTCCAAG AACCAGTTCT CCCTGAATTT GTTCTCCGTG ACCGCTGCGG ACACCGCCGT      360
ATATTACTGT TCTCGTGGGA CATCCCCCCC CCCCTCCTAC TACTACTCCA TGGACGTCTG      420
GGGCAAGGGG ACCACGGTCA CCGTCTCCTC AGGGAGTGCA TCCACCCTCG AG              472
```

(2) INFORMATION FOR SEQ ID NO:964:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

```

GCTCGGCTCG CTGCAACCTC TGCCTCCCAG GTTCGAGCGA TCTTCCTGCC TCGGTCTCCC      60
AGGTAGCTGG GACTACTGGC GTGCGCGACC ACGCCCAGCT AATTTTTTGT ATTTTTAGTG      120
GAGACGGGGT TTCACCATGT TGGCCAGGAT GGTCTCAATC TCTTGACCGC GTGATCTGCC      180
TGCTCGGCC TCCCAAAGTG CTGGGATTAC AGGCTTGAGC CACCGCATCC AGCCAACATT      240
TTTCAAATAG AAAATCTGAA GCTAAAATCA CCCCTAAAGG ACAAATAACA GGACTATCTC      300
GAG                                                                                   303

```

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

```

GAATTCGGCC TTCATGGCCT ACTAGATTAT GGATTTTTTT ATTTCAATGG AAGTGAAGTT      60
CAAAGATGCC AGAGTGGTAC AGTTCGAACA AACTGCTTGG ATTGTCTTGA TAGAACAAAT      120
AGTGTGCAGG CATTTCTTGG CTTAGAGATG CTAGCTAAAC AGTTGGAAGC TCTTGGTTTA      180
GCTGAAAAGC CTCAGTTGGT GACTCGCTTT CAAGAAGTTT TTCGGTCAAT GTGGTCCGTT      240
AATGGTGATT CAATCAGTAA GATATATGCA GGAAACTCGA G                                     281

```

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

```

GAATTCGGCC TTCATGGCCT AGACGTGATG TGTTGAGAGA AGAATGTTCT AGGCAGAGGC      60
AACAGCAGAT GCAAAGGTCT GAAGGGGAGA CAGACCGAGC TAGAAAAGCA TGGCACATCA      120
GTGATCTAAG TTCGTGTGGT TTCCTAAGGT TGGAACTAG GGTGCAAACT GAGGATGGGC      180
AGATGAGGTG GAAGAGGAAG AGCAGACCCA GGTCACAAAG ATCTTTTGTG CTAAGGATTT      240
TTAAGCAGGT AGGAGGAGAG AGAATATGAG CCTTGCGATT TGAAGTGTG TGGGTGTACA      300
GAAAAAGAGA AACTCAACGA GAGGTTTAGG TTTAGGGACG TGGTAGGCTT TTGCAGTAAG      360
GGACAAGGAC AGAAGGCTCA TCTGAGGATG GGAGGGACAC TTTAGAGGCA AATCCATAGG      420
ATGCAGTGGC TGAACAGAAA AGGTGAATCT CGAG                                                                                   454

```

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AGTCATTTAA	TTTAACTTAG	CAAACTCCA	ATAGTGTAA	60
TTAACAGATT	TTGGAACTG	GTTTAAAGTA	GATGTATTAT	AACATAAAAC	AAAGCTAGCC	120
ATTATCAAGT	TATTTCTTG	TTAGCTATTT	TTACAGCATG	TGCATGTTAG	GTAGTCATCG	180
TGAAAGCAAG	AATCTTAAGT	TAAATACATG	TTTTTTTGT	TTGTTTGT	TACTGCTGTG	240
CTGTATAATA	CATGATGCTG	TTAGCAGCGG	AACGTATCAG	AGACACGGCA	CCAAAGTATG	300
TTACTGTCGG	CGAAACTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATGGCCT	AGACTGCTGG	CATATCCACC	CCACCTGTGC	TGCTGCCCCC	60
GCCAATCCAT	CAGGGCAGCT	CCGACTCCTG	CAGCACCCAC	CGCCCAGGAC	GTCAGCTACT	120
CAGGTTTTCT	GGCTGCTGGG	GTTCCGCACG	AATGGGCCCT	TCTTTGGGA	AAATGCCAGG	180
GAAAGGGAAC	GGCTGGGCTC	GGGCGCCACA	GCTTGTCCT	CCAGCCAGCA	GGCACAGATG	240
TATGGCGCAG	GAGGGACAAC	TGGCCCTGT	GGCCAGCCCC	AGAGAGACGG	GCCCTTTCTT	300
TGGGACCCTG	GCCTCAGAGG	CCTGCGTGTC	ACAGCTCAGG	GTCTGGCTGG	GCAGGGGCAA	360
AACCTGCCTT	ATTTGCCAGA	TGTCCAGAA	GTACACAGGA	GCAGACGCAC	CACTTCGATG	420
GCTATTTTAG	GAGGCTGGTG	ACAAGCAAGG	CATGGTGGCA	GGAAGCCAGG	CCCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

CTCGAGGTCC	CTGTCCTGCT	CAGTTTCTCT	TCAATGTGGA	AGTCCTGGGA	GGTCAGTCTC	60
ATGAGAATAA	GGTGCTGTAC	TTTCACAGCC	TTCTCAGACT	TTTCTGAGGA	TGGCCTTACA	120
CTTGCCAGCT	AGTGGAGTGA	GCAGAACTCC	TCCTGGTTTC	TGTGGCTGTT	CTCAGAATGC	180
CCTAGTTCAC	TTCCAGTAA	TACTTTTTTG	GGAAACATTTT	GTGTTTCTCA	TTTTCTCAGG	240
TCCCCCAGGC	ACACCATCTT	TCCTCTGCTT	CCTCTCACAC	AGGTGCTGAT	ACTGTGTAGG	300
TTTGGGGCTG	TTGTTCTGGC	CCACTCCCTG	ATATTTTCTG	GGTTTGTAC	CTAGTTTTCT	360
TAAAGTATC	ATCTACATGG	TTTTGGTTTC	ACTATCTATT	CTGTCTTTAT	TTGAACACTA	420
GGGGAAATTC	ATTATGCCAA	TCTCACACAT	TGTGTGATTG	CATTAGGCCA	TGAAGCCGA	480
ATTC						484

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

```
GAATTCGGCC AAAGAGGCCT AGGCAAAATG AAAATACTTG TGGCATTCTT GGTGGTGCTG      60
ACCATCTTTG GGATACAATC TCATGGATAC GAGGTTTTTA ACATCATCAG CCCAAGCAAC      120
AATGGTGGCA ATGTTTCAGG GACAGTGACA ATTGATAATG AAAAAAATAC CGCCATCATT      180
AACATCCATG CAGGATCATG CTCTTCTACC ACAATTTTGG ACTATAAACA TGGCTACATT      240
GCATCCAGGG TGCTCTCCCG AAGAGCCTGC TTTATCCTGA AGATGGACCA TCAGAACATC      300
CCTCCTCTGA ACAATCTCCA ATGGTACATC TATGAGAAAC AGGCTCTGGA CAACATGTTC      360
TCCAGCAAAT ACACCTGGGT CAAGTACAAC CCTCTGGAGT CTCTGATCAA AGACGTGGAT      420
TGGTTCCTGC TTGGGTCACC CATTGAGAAA CTCTGCAAAC ATATCCCTTT GTATAAGGGG      480
GAAGTGCTTG AAAACACACA TAATGTCGGT GCTGGAGGCT GTGCAAAGGC TGCACTCGAG      540
```

(2) INFORMATION FOR SEQ ID NO:971:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 289 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

```
GAATTCGGCC TTCATGGCCT AGCCAGTCTC AGCACTTAAA CAACCAGGTG TTGAAGGACT      60
ATGTTCCAAA GAACAGAAGA GAGTATGGTT TGCAGATGGT ATATTGCCCA ATGGTGAAGT      120
TGCAGATACA ACAAATTAT CATCTGGAAG TAAAGATGT TCTGAAGACT TTAGTCCTCT      180
CTCACCTGAT GTGCCTATGG TAAGGAATTC AAAGAATACT TAATTGACTA AACAAATTT      240
TATTTCTAG ATAATCCTG GTGTGATTAT TAGAGTGCTT TTTCTCGAG      289
```

(2) INFORMATION FOR SEQ ID NO:972:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 418 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

```
GAATTCGGCC TTCATGGCCT AGAGCTTGGG AGGTTGAGGC TGCACTGAGC TATGAGCTGC      60
ACCACTGTAC TCCAGCCTGG GTGACAGGGC AAGACTCTGT CTCAAAAAAC AAAAAACAACA      120
ACAAAAACTT TATTCCTAAA AAGTGCTGAC CCAGAGATAA GAAGCAAGCA CATGGTTGGT      180
AAAATGACAT CAGTGAGCTT GCTTTATGCA GGGTTGCCCC AAACCTTCAA TTTGTAAAAC      240
TCAAAATATC TGGAAAGCTT GGTGAGGCGA GGCGGGACTG TAACTCAGCA CTCACCGCAG      300
GGTGAGACCC TTAGGGCAGC GGGTGCTACA CTGAACAAAG CCGTGAACAG CCCCTCGTG      360
AGAGGGGGTT CTTGGCAGAT GACGCCAGCA GCTGACAAAC AGGCAAGTGC AACTCGAG      418
```

(2) INFORMATION FOR SEQ ID NO:973:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 276 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

```
GAATTCGGCC TTCATGGCCT AGATTGTAA AAGATTTTCC TAGATTACT GTGTTCTGGA      60
TCTAGCTTGA ACGTGAATGT TTGTATAGTA CGTTTCTTA ATATTTTAA GTATTCATAG      120
TATATAATCA TACTAAACTT GAGAACTGG AAGAATCAAG TCTTCCTCAG TTCTGTTTAG      180
ACTTCTAGT TTTTAAAG GATACTTCCA TATCTTCTGT AAGCTACACA GTGAGCTTCA      240
TTTTGCACA GTTATAATAC ACTCTCGAAT CTCGAG      276
```

(2) INFORMATION FOR SEQ ID NO:974:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 379 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

```
GAATTCGGCC TTCATGGCCT AGGGTTCGAT GATAAGCACA GGCGGCAGCT GGATTGCAAG      60
TGGAGTGTA ATGGCCAGAA CAGCCTCTT CTGTTTGCA TTAGTCGAG GATCCAAGT      120
TTCATCCCAT TGTCTGTTAG GACTCCATGG TATGGTGGA GTCATACTGA TGTCTGGA      180
CAAAACCCCA TTGTCCCTGA TCCTGTCTAG TGCATAGTGC ATTTCACAGA GGGGTAATCG      240
ATTTAATTGA AACTGAAGTT CAACCTGTGT GTCACAGTCA GGCCGAAGAT TAAGTTCTTC      300
ACAGCATTCC CTAGATAGCC TTAAAAATAT ATATTCCTTT GTTTTTTCTT CAATAGTAGC      360
TTCCTAGACC TGCCTCGAG      379
```

(2) INFORMATION FOR SEQ ID NO:975:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 417 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

```
GAATTCGGCC TTCATGGCCT AAGAGAAAGA GAGTGAGAGA GAGAGAGAAA GAGAGAGAGA      60
GATGCTGTTG AATCAGAAAC AGATCAACAG CCCAAAGATT TTCCTGTCCC TGGAGTGCCA      120
GCCCCAGGAA GCTCCAGGGC TGAGTGGTCA GGAGCCAGTT TCTCCAGCCC CTCCTCCCA      180
CAACCCCTAG TGGGGAGGGG CAGCTGTCCA TTTGCCCAA GTATTAATGC AACTGAAGCT      240
GTGATATTTC CAACGACTGT AGGAGGAAAA ATTAAGGGGA GAGAGGAAAA CAAAACCAAC      300
CAACCCCTAA AATCATTTTC TTATTGTACA TAACGACCTC ATTCTCCTGT ATATGCGGAA      360
GATATAACCT TATATTGGT AAGTGTCTTCT TGTGCTATTT TATCACGCGA CCTCGAG      417
```

(2) INFORMATION FOR SEQ ID NO:976:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 154 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

GAATTCGGCC TTCATGGCCT ACACAGAAAA ATTTCAACAA TAAAAGTTCT TAATTATGGG	60
AAATAGTTAC ATGTGTGTTA TATCATTTAT GGCTCATTTT GTATTTTAT TAAAAAGTAT	120
TAAAATCCCA ACAGTAACAG CAATACAACG CGAG	154

(2) INFORMATION FOR SEQ ID NO:977:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 252 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

GAATTCGGCC TTCATGGCCT AAATTGTTCT TTGCTCAAAT AAAGTGTAA ATTTATCTTG	60
GCAGACTCTA TTTTGATCCC CAAATTTGAT TTAGATTTGG GGCCATTAAA TTCACTATT	120
TAATAATAAC CCTACTGGAT GAGAATAAGT GTTCTCAAT TTCTGGTGAT ATGGTTTGGC	180
TGTGTCCCA CCCAGAATCT CATCTGAAT TATATCCCC ATAATCCCCA CGTGTCAACG	240
GCAGACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:978:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

GAATTCGGCC TTCATAGCCT AGTTTAGTTC TCAGAATTCT TCATATATTT TGGCAGCAGT	60
TTTTCCATCA GATTATTTTG TAAATATTTT CTCCCAGTCT GTGACTTGCT TTTTCCATTG	120
TCTTAACAGT GTCTTTCACA CAACAGAAGT TTTTAATTTT AATGAGGCTC AACTTAATTT	180
TTTTTTTCATT AGTAGATTGT GCTTTTGGTT TTGTATCTAA GAAGCCATCA TTGAACCCAG	240
GATCGCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:979:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 534 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

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GAATTCGGCC TTCATGGCCT AGAAGGCTTC TGAATAATTT CTCAAACTA NCTTTCCATT      60
TNAGTACACG ATTTGATAAA CATAGCACAT TAGATAGGTA TTTAGCAATT TCTTCTACCA      120
ACTACACTTT GCCCTCACTA AGGGTTAGAG TATGATTTGA AACAAATTTCT ACATATAAAG      180
CATCTTTAAA TAAGTTTGT GTTCACTGAA CTGAGACTTC TTTCACTTAT GTACCTATGG      240
AAGTTAATCT GAGCATAAC ATATATACAT ACTTGCATAC ATATGTGTAC ATATGTTTTT      300
TAAGTAAGTN ACTTTTACCA TTAGAATAAA CCTAGACACT ACAGGGACAA CTCTGGGGAA      360
CAGGGCGGTC TGCCTTAACA ACCCTTCTCT AGGTTGAGGA AGGCAGGTAT AGTTCCTGA      420
AGGATGTGAT GAGGCTGTAG 1AAGTCTTCT CATCATCTGT TAATCCTGCG TTGCCTGGTC      480
TCACCACCAC AGCTACGTGC ACATCTGCTT CCTCAGCAGC ACTGGCCTCT CGAG          534

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(2) INFORMATION FOR SEQ ID NO:980:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

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CGTCGAGTGT CGTGCTATCT CTAAATTGTG ATCTAAGA ACCGCTGCGG AAACAGTAAC      60
TGTTTCTTTT ATTTTGGACA TTTAGTTTG TAATTTATCC AATCTTTCT TCTTTTGATA      120
AGTCTCCATT CTCTTACTT CACGGGTATT TTCAAATCA TTAATCATTT TATCACAGTG      180
CCACTTGTTA GACCCTAATG AACGATGTCA CCCTCTTATC AAA          223

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(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

```

GAATTCGGCC TTCATGGCCT AATTACTTGA CCCGTAATAG GGTGTGGCC GTTTCTGAT      60
GCCTAAGTAT TATACAGAGC CCACAATGGC CAGTTTACTA CCAGAAAGGG CTCAGTAAG      120
ATATTCTTGG ACTTGATACT TTCTTCAGAT CCTCTTTGTG CCAAGATAAT TTATCCAGTC      180
ATTGGGAATA GTAAGTTTCT GTGTAACCCA TCTCAATTAT AGAAGCAAGT TCAGCTTTAT      240
GTATTGTAT GGGGAGTTGA AGATTCAGAT AGAGGTATTA AGATGTGTGG CATTACTTA      300
AACCATCACA TTTTTTCTT TCTACGCCCC CTTGCCTGTA AAACACCTGG GAAGTCCAC      360
TGGTGTATC CATCCTGATG CTTACAGACCA CCTCCCTTC TTCACAGACC GTGTCACTTT      420
GCCTGTGGGT GGGGGCTAGC CAGCCACCAC CCTCTTTTCT GTGCTGCCAG CCAATCTCGA      480
G          481

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(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

TCCGTGTCCC	CTCCTCCCTC	TGCCCCCAGT	GTTTCTTCTG	ATTTTTTTTT	CCCCTTTCCC	60
TCCCTCCCTC	TCCGCATTCT	TCCCTTGGTT	CAGCACAGGT	AAAACGGTTC	CCCTCCCTCC	120
CTGCCTTCAT	GGATCACCAG	CTCACGTCAT	GTTGCCTTCT	CTTTTCTTGT	TGTGTGTGTT	180
TATTTAAGTT	ATTTTCTTC	CTCCTCTCCC	TTTTCTTTTT	GGCCCTCCCT	CCCTCCCTCT	240
TCTGCCATGT	AACTGGAGGA	TGTGCTATGA	GTTTGCAAAC	AGCCGGACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

GGTGAGGATG	GTGGCTGTGG	TGTGTTGGT	GGCTGTGATG	GTGAAGGTGG	CTGTGGTGGG	60
GATGGTGACT	CTGATGCTAA	TGTGGTTGT	GGTGATGGAG	GCAGCTGTGG	CAAGGATGGT	120
GACTTTGGTG	GAGAAGGTGG	CCATGTTGGG	GCTAGTGGCT	GTGGTTGTGG	TGATGGCCAT	180
GGTGAGGATG	GTGTTAAAGG	TGGCTGTGAT	GAAGATGGTG	ACTGGGGTAG	AAATGTTGAC	240
TGTGATGGTA	ATGTTGGCTG	TGGTGATGAA	GGGTAGTTAT	GGTGAGGATG	ATGACTATGG	300
TGGTGAAGGG	GCCATAGTGG	CAACGGCACT	CGAG			334

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 631 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

GAATTCGGCC	TTCATGGCCT	AGGGAAAGAG	TAGGGGTGGA	GGGCTAGGAG	GATTACTCT	60
TCCAGCGAGA	GCTACGCGCA	TCCCATCCTC	CCCCTCCCCC	CTACCCGGGC	TCCGGCNTGG	120
AGGCGGGGCG	TGGCCGGCCT	GCTTTGGGAG	GGGAGGGGCT	TCCCTTACAG	TGCTGGGCTC	180
TGCCAGGACG	GCTGTGGGGT	CGCCTTACCT	CGGGGTATCC	ACTCTGCAGT	CGACCAGTTC	240
CCGCCAGGAG	CAAAGGGTAG	GAAGGAGAGC	AGGATCTGCT	GTAGGAACGC	AGCTACCGCG	300
CCACTATCAC	GAAGAAACAG	CAGGCTCGGG	GCACGAGACG	AACTGGAGAC	CGCGCTGCCT	360
AGCTGGGTAA	CCTGGGAAGC	AGAGGGTAAT	AAGTGCGGCC	TTAAGATAAC	CCTGTAGCAG	420
CAGCAGTGGC	GGCCAAAGGA	GGCTGCTCAG	GGAACAAGCG	GCTGTAGTAG	TCTGTGGGGC	480
GACTGGAGTG	ACCGAAGCCA	AGGCAGTTTA	GTGCCTCTCG	TGTTCTTATT	TTTAAACCTC	540
TGACTATGCA	ATTCTGAAAC	CTCCCCCATT	CGGGGGACCA	GACAGCCTGA	TAGACACCTT	600
CCACTCTCCT	TCCTCCCGCC	GTGGTCTCGA	G			631

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

GAATTCGGCC	AAAGAGGCCT	ACTGCCTCGG	TTTCTACCTT	TGCCAAATGA	GTGATAGAT	60
TATCGCTTTT	TTTCCAGCTG	TCATACTCTA	GGAGTCTGAA	TTGTAAAATC	AAAGAAGCAT	120
TTCCAGAAA	AGTTTTTGTC	AAAAATTGTA	TTTACATAAC	CTCAGAAATG	TGTATTGCTT	180
TAAAAATTAT	AAAGTTCATG	GAGCATACCA	AGCAGCCTGT	ATACCATTTC	TAAACCAACT	240
ACTCCCCTGC	AAGATAGATC	TCTTTTTTAT	AGACAGAAAA	TAAATTCAAA	GAGGTTTGT	300
ACTTGCCCAA	GGCCACCACT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

GAATTCGGCT	TTCATGGCCT	AAAATGTTTT	TCAATTAAAG	ACTTAAATAT	TACACTTTTA	60
AAACTTTTTTA	TTATGGAAAT	CTAAAAAATA	TTCACCAGAT	GAGAGAGAAC	ATTACAATGA	120
ACCCACACAT	ACCCATCACC	CATTTTCAAC	AATTATCAAC	ACATGGCCTA	TCTTGTTTCC	180
TCCATACCTT	CAGACACCTT	CCGTCCACAA	ACTGGGTTAT	TCTGAAGCAA	GCCTTCGAG	239

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 695 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

AAAAGTTCAG	GGACTTTGCA	CCCTGTGGGG	TACTCAGATG	TCCAGCCGCA	CTCTCTACAT	60
TAATAGTAGG	CAACTGGTGT	CCCTGCAGTG	GGGCCACCAG	GAAGTTCCGG	CCAACTTTAA	120
CTTTGCTAGT	GATGTGTNGG	ATCACTGGGC	TGACATGGAG	AAGCTGGCAA	GNGACTCCNA	180
AGCCCCACCC	TGTGGTGGGT	GAATGGGAAA	GGGAAAGAAT	TAATGTGGAA	TTTCAGAGAA	240
CTGAGTGAAG	ACAGCCAGCA	NGCAGCCAAC	TTCTCTCTCG	GAGCCTGTGG	CTTGACGCGT	300
GGGGATCGTG	TGGCAGTGAT	GCTGCCCNGA	ANGCCTGAGT	GGTGGCTGNN	GATCCTGGGC	360
TGCATTCGAG	CAGGTCTCAT	CTTTATGCCT	GGAACCATCC	AGATGAAATC	CACAGACATA	420
CTGTATAGGT	TGCAGATGTC	TAAGGCCAAG	GCTATTGTTG	CTGGGGATGA	AGTCATCCAA	480
GAAGTGGACA	CAGTGGCATC	TGAATGTCCT	TCTCTGAGAA	TTAAGCTACT	GGTGTCTGAG	540
AAAAGCTGCG	ATGGGTGGCT	GAAGTTCAAG	AACTACTAA	ATGAGGCATC	CACCACTCAT	600
CACGTGTGTG	AGACTGGAAG	CCAGGAAGCA	CTTGCCATCT	ACTTCACTAG	TGGGACCACT	660
GGTCTTCCCA	AGATGGCAGA	ACATTCCTAC	TCGAG			695

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

GAATTCGGCC	TTCATGGCCT	ACTCAGAACA	ATCACTGCAT	ATCCCATCTT	AAAGGCAAAA	60
CCCAAACCCAG	AAAAACCCCA	CTCAGGTCTT	GCTGACCCAA	CACTACAGTC	ACTGTATTTG	120
AGACCCCTTT	TTCTTGAAAA	AGGGACTTCA	CTTTTTTGAG	CAGCATTCTA	TGGTTCTTTC	180
CACACAGCAA	TTGACGCATC	TCACGGCACT	GCTCTCTGCT	GGGCAGAGAG	CAAAACACAGA	240
CAGCCACCAT	CCCCATATTC	GTAGTAAGAG	AAACTCCAGA	AACGCAGCCA	CCGTCCCCCT	300
AGACCTGCCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

GAATTCGGCC	AAAGAGGCCT	AGGAGCTCCC	CCATGGATCA	TGGCGTTAAT	GTTTACAGGA	60
CATTTACTAT	TCTTAGCATT	ATTGATGTTT	GCTTTCTCTA	CTTTTGAGGA	ATCTGTGAGC	120
AATTATTCCG	AATGGGCAGT	TTTCACAGAT	GATATAGATC	AGTTTAAAAC	ACAGAAAGTG	180
CAAGATTTCA	GACCCAACCA	AAAGCTGAAG	AAAAGTATGC	TTCATCCAAG	TTTATATTTT	240
GATGCTGGAG	AAATCCAAGC	AATGAGACAA	AAGTCTCGTG	CAAGCCATTT	GCATCTTTTT	300
AGAGCTATCA	GAAGTGCAGT	GACAGTTATG	CTGTCCAACC	CAACATACTA	CCTACCTCCA	360
CCAAAGCATG	CTGATTTTGC	TGCCAAGTGG	AATGAAATTT	ATGGTAACAA	TCTGCCTCCT	420
TTAGCATTGT	ACTGTTTGTT	ATGCCCAGAA	GACAAAGTTG	CCTTTGAATT	TGTCTTGGAA	480
TATATGGACA	GGATGGTTGG	CTACAAAGAC	TGGCTAGTAG	AGAATGCACC	AGGAGATGAG	540
GTTCCAATTG	GCCATTCCTT	AACAGGTTTT	GCCACTGCCT	TTGACTTTTT	ATATAACTTA	600
TTAGATAATC	ATCGAAGACA	AAAATACCTG	GAAAAAATAT	GGGTTATTAC	TGAGGAAATG	660
TACGAGTATT	CCATGGTCCG	TCTCGAG				687

(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

GAATTCGGCC	AAAGAAGGCC	TAGAGCCCTT	CTGTCCCTTC	TACCATGTGT	GGATGCAGTG	60
AGAAGGCACC	GTATCTCTGA	AGCAGAGAGC	CCGCCCTGGA	CACTGGATCT	GCTGGCACCT	120
TGATCTTGGA	CTTCCCAGCC	TCTAGAACTG	TGAGAAATAA	TTTTTTGTG	TTTACAAATT	180
ACCCAGGCTA	AGGTGTTTCA	TTGTAACCTG	AATGGACCAA	GCTGGTGTGA	CCCTGTTGGA	240
AAACTGGCAG	TATCTACCAA	AAGCCGAACA	TACGTATAAA	CTGATCCAGC	AGTTCCACTC	300
CTGGGTATGT	ACACCACAGA	AAGCTATGTC	CACCGAGACA	TTGGCAAGAA	TGTTTCTAAC	360
CACACGCTGA	CTGTAGCCCC	AAACCTGAAA	CAACCCAAAT	GTCCATCCAC	CAACCCAAAT	420
GTCCATCCAC	AGTTGAAGCT	ACAGTGAAGT	CACAGGGTCG	AATACTACTG	CACAGCAACG	480
AATATGAATG	AAAATATCGC	TATGCACAGC	AACATGGATA	AATTTACAG	ACATGAGGTC	540
AAGCAAAAGA	GGTCAGAGTC	CTCATCATCA	AGAGAGAATT	CATTGTATGA	TTCTCTTCCT	600
ACAAAAAGTA	CAGAAATAAG	CAAAACTGAT	CCATGGTGTT	AGAAGCCAGG	GGAACAGTTA	660

ACAAGGGAGC ACTCGAG

677

(2) INFORMATION FOR SEQ ID NO:991:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 445 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

GAATTCGGCC	AAAGAGGCCT	AAGAAGCTGC	TTCCTCCTGG	GAACAACCGC	CTCCCGCTCC	60
TAGCAGGTTG	CTACTGCCCC	GAACCCGCGC	TGCAGGGAAC	AGCGGGGCAA	ACAAAACCAA	120
TAGAGCCATG	GCGACTCCCT	CTGCTGCCTT	CGAGGCCCTT	ATGAATGGTG	TGACAAGCTG	180
GGATGTACCC	GAAGATGCTG	TTCCATGTGA	ACTGCTTCTT	ATTGGAGAGG	CTTCATTTC	240
TGTGATGGTG	AATGACATGG	GCCAGGTCCT	CATTGCTGCC	TCCTCCTATG	GCCGTGGCCG	300
CCTGGTGGTC	GTGTCCCATG	AGGACTACTT	GGTGAAGCC	CAGCTCACGC	CCTTTCTCCT	360
GAACGCAGTG	GGGTGGCTTT	GCTCTTCCCC	TGGGGTCCCC	ATTGGTGTAC	ACCCATCCCT	420
GGCACCTTTG	GCCAAAATCC	TCGAG				445

(2) INFORMATION FOR SEQ ID NO:992:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 392 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

GAATTCGGCC	TTCATGGCCT	ACTGTGATTT	AAAATCTTGC	TGTGTGGCTT	GGGTTGTTTG	60
TGTTGGTTCC	AAACCCTGAA	TCTTTTGGGG	TCTTCAATTT	GTGGGCATGT	CAGTGGAAAT	120
TCTAAGCTTT	GTTTAATGGT	GTGTGTGTGT	CTGTCTGTCT	CTGTGTGAGT	GTGTTTAGAA	180
ATTGGCTTCT	CTGGGTTCTT	CGCTCGTCTT	CTGGAAGGTG	GGGTTATAGA	CATGCTGGTG	240
AATTCTGAAT	GTTTTATAAA	TTAGACTATT	AACGGAGTTA	AATTGAAGAA	ACCTTCTGTC	300
ATAAGACCTT	CCAGGAATTC	CATTCCAAAT	GAGGAAATGC	ATAAAGACTT	GTCCACTTGG	360
CAACATTGG	GTGTTTGGGA	GGTGGACTCG	AG			392

(2) INFORMATION FOR SEQ ID NO:993:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

GAATTCGGCC	TTCATGGCCT	AGGCGGCTCC	CTTGGTCCTG	GTGCTGGTGG	TGGCTGTGAC	60
AGTGCGGGCG	GCCTTGTTCC	GCTCCAGTCT	GGCCGAGTTC	ATTTCCGAGC	GGGTGGAGGT	120
GGTGTCCCA	CTGAGCTCTT	GGAAGAGAGT	GGTTGAAGGC	CTTTCAGTGT	TGGACTTGGG	180
AGTATCTCCG	TATTCTGGAG	CAGTATTTC	TGAACCTCCA	TTAATAATAT	ACCTCTTCA	240

TTTCCTAATT GACTATGCTG AATTGGTGTG TATGATAACT GATGCACTCA CTGCTATTGC	300
CCTGTATTTT GCAATCCAGG ACTTCAATAA AGTTGTGTTT AAAAAGCAGA AACCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:994:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 115 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

GAATTCGGCC AAAGAGGCCT AGACTGTCAG CTGTGAGTGG CCAGTACAAC AAATGCTTTG	60
GCTTTCAGTT GTCATTCTGA TGTCTTGCAA CATATCATCG TGTTTGATTG TCGAG	115

(2) INFORMATION FOR SEQ ID NO:995:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 633 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

GAATTCGGCC AAAGAGGCCT AGTGGAGACA AAAGCATGTG ATCCCAATTT GCTGGGATAT	60
CCTCTCCTGC ATTTCAAACA CCTTCACTCA GTGTCAGCCA CAGCGGCCAC CACATAGCAG	120
CTGGCCCCGC ACCTTCTCTG GAACAGTCTG GAGATGCAAG GTCAGGGTGG AAGGCCTGGT	180
TCACCCCTGA AAGAAAGGAT GGCTAGGGGT AAACAAGACG AGCAACTCCC TGGAAATGCAG	240
GGAGCCAAGA AGGGCAGCCG AGGATAAGGC TCTGCCTCCC CAACGGCGAG GGTTCCTTT	300
CCTTCTGGTC ATTANAAGTG CACAGCCCCC GGGGAGATGT TGAACATGGC AGGGTCGAAT	360
CGCTGGCCTC GGAAGGGAGA ACTTCAGCAT CCCACCCTTC TTCAGCATCT CATGGACTTT	420
CAGCTCATGG CTCTGTGGCT TGCCCTGCAG CTTCTGGTGG TAGTCAAAGG TAAGCCTGTC	480
CAACACCGCC TGTTCTCCT CATCCACGGT GGCCATGGAG CGCTCCTTGT TGATCTTGTC	540
AATGTCGATG GGCTCTTCTC CCTCCAGGAT GGCGTTCAC CAATACTCGC CCACCTTGCT	600
CAGGTTCAAC AAAACGCACT TCCCGGGCTC GAG	633

(2) INFORMATION FOR SEQ ID NO:996:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 462 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

GAATTCGGCC AAAGAGGCCT AGTTGATTCT CAGTTCATGG TGGAGTCATT CAAGTTTATT	60
TCTGGCATCT TGGCAGCCCT GAGTGCCATG ATCTCTCTAG AAATTCGCGA AGTCAACATC	120
ATGACAAAAA TGGATCTGCT GAGTAAAAAA GCAAAAAAGG AAATTGAGAA ATTTTATGAT	180
CCAGACATGT ATTCTTTATT AGAAGATTCT ACAAGTGACT TAAGAAGCAA AAAATTCAAG	240
AAACTGACTA AAGCTATATG TGGACTGATT GATGACTACA GCATGGTTTCG ATTTTACCT	300

TACGATCAGT CAGATGAAGA AAGCATGAAC ATTGTATTGC AGCATATTGA TTTTGCCATT	360
CAATATGGAG AAGACCTAGA ATTTAAAGAA CCAAAGGAAC GTGAAGATGA GTCTTCCTCT	420
ATGTTTGACG AATATTTTCA AGAATGCCAG GATGTACTION AG	462

(2) INFORMATION FOR SEQ ID NO:997:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 548 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

GAATTCGGCC AAAGAGGCCT AGCTGGTAAC ACATGTGAAC TCAGGTAAAG TCATCGAGCA	60
TTTTACTGAC TCTATTCCTC AATAAAGTAC TGGGAAAAAA CTCATAAGAA TGACAAAAAC	120
AACATACTCA GGTATGCGAG CAGAAGCCTC TGACACAGCT TGTCTTCGGG GCTTAACTAA	180
ATGATCTATT TTAATGAGGG AATCGTGGA AAGGCATGCG TTTTCAGGCT CATTTCTGTC	240
TTCGATGCTT TGTCCAGAGA GTTGGAATCT CAACGTGTGT TTCATGTGAG GCTCCTTAAG	300
AGGGTGACAT TCAACATCCC AAAACTGGGC ATAATCCCCC CTACCTCTGG GCAAAAATGT	360
GATGGAGACT TTTTGGATCC CATGGCTTTC CAGCAGACCA GAAATAGGAG AACATCTGAA	420
TGCTGCATAG GTAGCTCTAA AAACATCTCC ACTTTCATCA ACTCCCTTGA CATAAGGTGG	480
CACCACAGAC GTGAAATGGC ATCTGTCATC TTTAGCGCCA CCTTATGTCA AGGGAGTTGA	540
TTCTCGAG	548

(2) INFORMATION FOR SEQ ID NO:998:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 572 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

GAATTCGGCC AAAGAGGCCT AGTTTCCTT TCTGTATTTT ACTACTAAAT TAGAAAGCAC	60
TGGTTATGTA ATAAGTTACT ACATTGCTTT GGTGAGTAA AAACAAGAGT ATATATTTT	120
CTGTTTTCTT ATTTNCTAAA CCTTAACTC CTGCTGAGGT CATAACAACC TCAGTCTAAG	180
CTCTGTGTCC ATCATACTGT TAACITAAAC AAATGGGTGG TGGGGGTGGG AAGGGTAATA	240
CAGTCCTGCC ATTGCCTACC AGTAGGAGAG TCCAAACAGA ACACTCTTTT GAGTAGCAAT	300
TATTTAATTT GCCCAGTCAA GGCACCGTGT TTATATACTA TTTACATTG AATTTGATTA	360
TGCCCTACAG ACCTGGCTGG TCAAGGATTT GATATACACA TATTGGCTTG GGATTGAGC	420
TTCTTTTTT ATTTAAATAA AAATTTATAT ATATATTATA TATATACATA TATACATAGC	480
TATATCTGTA TATATATTGG GTATGTTTTA AGGATTTTTT CGCATGAGCG CAGCTGTTGC	540
GATAAATTGA CCGATTGGGA GGTATTCTCG AG	572

(2) INFORMATION FOR SEQ ID NO:999:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 629 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GAATTCGGCC	AAAGAGGCCT	AGAGGGGAGC	ACGCTCTTTC	CTTGAGTGTA	ATTCACATAAT	60
GACTGTGGTT	CCAAGGAGGT	GCGACCTTTA	AAGGGAATTG	GCCCTTCTTT	GAAGGCAGGT	120
GAGAATCTAG	TCTCAGTGAC	AACCCAGCCT	GATTTGGAAG	GGGGGAGTCA	TAAGGGTTTT	180
CGCCCAGCAC	ACCAGGGTTG	CAGCCTGCGC	AAGACCTTCC	ATAGCTATTT	CTGCCGGCTT	240
GCTTCCTTCC	CTTCCCAGCC	ACGATGAGGC	AGCTGAGGGT	TGCCACGGAA	ACCGGCTCTG	300
TCCTCCCACT	GGAGGCTGCC	AGCTCTGATT	TCCTGCAGAG	TTAAGAAGGA	GGCGGCAGTG	360
GGGGTCACCC	AGGCGTGAAG	ATGGGTTCCT	CTGGGGATAT	CCTGCCTCCT	GCCAATCACA	420
GCGTCTCTCT	GGGAATCCTG	GGGGTGCCTG	GAGGCTGAGG	CCCAGGGAAG	CCCCCAAACC	480
CCAGTGCTGC	TCTGAGAAGA	GACTAGCCTC	TGGGACATTC	AGAGGTCTGG	GGTTCTTTTA	540
TCTCCCTCCA	GCTAAAGCTA	GAGGGACCTC	ATTATGTGTC	TTACAAGATG	TACCCTAAAC	600
CGTCGATTGA	ATTCTAGACC	CGCCTCGAG				629

(2) INFORMATION FOR SEQ ID NO:1000:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GAATTCGGCC	AAAGAGGCCT	ACCTGTATGC	TATTAACACT	CACCACAGCA	GAGAGCTGAG	60
GATTGTGGTT	GCAATTCGGA	ATAAACTGCT	TCTGATCACA	AGAAAACACA	ACAAGCCAAG	120
CGGGGTCAAC	AGCACCTCAT	TGTTATCTCC	CCTGTCTGAG	TCACCTGTTG	AAGAATTCCA	180
GTACATCAGG	GAGATCTGTC	TGTCTGACTC	TCCCATGGTG	ANGACCTTAG	TGGATGGGCC	240
AGCTGAAGAG	AGTGACAATC	TCATCTGTGT	GGCTTATCGA	CACCAATTTG	ATGTGGTGAA	300
TGAGAGCACA	GGAGAAGCCT	TCAGGCTGCA	CCACGTGGAG	GCCAACAGGG	TTAATTTTGT	360
TGCAGCTATT	GATGTGTACG	AAGATGGAGA	AGCTGGTTTG	CTGTTGTGTT	ACAACTACAG	420
TTGCATCTAT	AAAAAGGTTT	GCCCCCTTAA	TGGTGGCTCT	TTTTTGGTTC	AACCTTCTGC	480
GTCAGATTTC	CAGTTCTGTT	GGAACCAGGC	TCCCTATGCA	ATTGTCTGTG	CTTTCCCGTA	540
TCTCCTGGCC	TTCACCACCG	AATCTGAG				568

(2) INFORMATION FOR SEQ ID NO:1001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

GAATTCGGCC	AAAGAGGCCT	AGTAATACTT	AAAGTGCAAT	TGTTCCAAGG	CTTTTGTTC	60
CATCATCACA	AATATTATAA	AGAAAGAGCT	ATGTTTAGGG	TGAAGAAGAT	ATGGCACAAG	120
TAATATGTAA	AGAACTTATG	ACTTTCGCAT	CCTCTAGCAA	ACAGTAAGCT	GCCTGTACAG	180
CTGCACACAG	ACGGACTTTA	CACAACAAAC	TCTGGAACCT	CATCATGAGT	GAGATCCAGA	240
GAAAAGTATT	TGCTGGTTCT	TTTGACTGGA	AAAGCATCTT	GGATGTGTAT	GCACTGCTGG	300
GCCAAGCAAC	TGTTGCAATA	GAGGCCTTCC	TCATCCAGTT	CATGGCCACA	TCCAAAGGTG	360
TAATCTGTAG	CAGTGTCTCG	ACACAGACCT	GCAATGCGCA	GGAAGTCTTT	CTGGTAAAGT	420
CTGATGTCAT	CGAGGCTCAA	GCTGTGTGCA	TCAGTGGAGG	TCTTTGGTTT	CCGACATATA	480
GTCTGTGGAA	GAGAATCAGT	ACTCTGGCCA	CGAAGCTTAA	CAACTGTTTC	TGAAGAGCTC	540
GAG						543

(2) INFORMATION FOR SEQ ID NO:1002:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```

GAATTCGGCC AAAGAGGCCT AATTCCTT AC GAATTAAC ACTGTGTACA TGGCACCTTT      60
GGGCCCCATCT TGCCTTGAAA GTCCCTGTTG GATGGAACAG TGGCATTTC CTTCCTTTTC      120
TCAGGACTGC AAACAGACCT AATATTTGGC CTTGCCCTTG CCTGGGAAGC TGCTGCTGAG      180
TCTTGCTCTCA GCCGGGCTGT GCATTCCGAG CGGCTGCCCT GCCCTGCGCT CAGCAGCTGG      240
AATCAATCTG CCCACCTCCT TAAGAAGCCA CTTTCATCAGC GGTCAACCCGG CAGCTGCTCG      300
CCTCCCAGGG CTGCCGGGCT AGGGCTTTAT CGCATTTTTG AAATTCAGA TTTCTGTGTC      360
TGGGCTATGC CCCTCGAACA GTAACAGCAC CGCTTTCAG CAGGGAGGAG ATTTACCAG      420
GATATGGAGG GGACAGGAGA AAAGCCCTCC TTCCAGAGT CCACTGTCAT TCAGGATTTG      480
CTCTCAAAGA GGCAAGAAAT CTCTAAGAAAT GAAAGGAGGT GTTTTGTGTG TGTGTGTGT      540
TTTTGTATGT ACTGGGAGGA AATGGCTAAT CTTGGGTATG CACACGCTCG AG              592

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(2) INFORMATION FOR SEQ ID NO:1003:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAATTCGGCC AAAGAGGCCT AGGCTCCGTC TGTGGGGGG CGAACACGCC GCGGTCCTCG      60
TCGTGTGAAG TAAGAACTCT GCTAGAGAGG AAATGGCTGC TTTCATCATCA TCCTCCTCAG      120
CTGGTGGGGT CAGTGAAGT TCTGTCACTG GATCTGGTTT CAGTGTCTCA GACCTTGCCC      180
CACCACGGAA AGCCCTTTTC ACCTACCCCA AAGGAGCTGG AGAGATGTTA GAAGATGGCT      240
CTGAGAGATC NTCTGCGAAT CTGTTTTTAG CTATCAAGTG GCATCCACGC TTAAACAGGT      300
GAAACATGAT CAGCAAGTTG CTCGGATGGA AAAACTAGCT GGTTCGGTAG AAGAGCTGGA      360
GGCTGACGAG TGGCGGTTTA AGCCCATCGA GCAGCTGCTG GGATTCACCC CCTCTTCAGG      420
TTGATACTGC CTGGATGGTC ACCTCTGGTG CGCAGCAAGT GCAAAGCCAG TGGGGGACTT      480
TCTCACAGCT TACATAGCCA TCCAGAGATC CACAGCTACG TCACTGAATT GTTAATGCAC      540
ATTGTACTT GGTTCCTCTG TATCTATTCA CAGGCGAACT CGAG              584

```

(2) INFORMATION FOR SEQ ID NO:1004:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

```

GAATTCGGCC TTCATGGCCT ACTTTCTCAT TCCCTAAGTC ATTAGAAAGC ACCAGTTCTA      60

```

ACTCCAAATG	ATGACATGGT	CTTATTTTAT	CTATTAACCA	TAAGCTTACA	GATTCTAGTG	120
AAGAAAAAAC	TTTAGGAGGC	TACATGGTCT	ATTGGAGAGT	GTAGGCTCTG	CAGTCAGAAG	180
ATCCCTACCC	AGGCTTCTGT	CTTTCTCAGT	AAGACTTGGG	ACCACAGCAA	GGTCCGCAAT	240
CTCCTGAGGC	TCTGTTTTCT	ATGGTTGGGA	TAACATGGTA	AGTTATTTTC	TTCTAAGTAG	300
TCACACATGG	AAATCTTATC	TAAAATTTTA	TACCATTAAAC	TTTATTTCCT	CTTATTAACT	360
CATACCATTA	ATACTTTACT	TTAGCTATGT	TTGGTATGCA	TGAGTTGATG	AGTGATTAGA	420
GTACTATGAG	CGATCTCGAG					440

(2) INFORMATION FOR SEQ ID NO:1005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

GAATTCGGCC	TTCATGGCCT	ACTCAGTTGC	AGATTCTGGC	CAACATGGAC	AGCCAGCTAA	60
AAGAGCTACA	GAGTCAGCAT	ACCCATTGTG	CCCAGGACCT	GGCTATGAAG	GATGAGTTAC	120
TCTGCCAGCT	TACCCAGAGC	AATGAGGAGC	AGGCTGCTCA	ATGGCAAAAG	GAAGAGATGG	180
CACTAAAACA	CATGCAGGCA	GAAGCTGCAGC	AGCAACAAGC	TGTCCTGGCC	AAAGAGGTGC	240
GGGACCTGAA	AGAGACCTTG	GAGTTTGCAG	ACCAGGAGAA	TCAGGTTGCT	CACCTGGAGC	300
TGGGTCAGGT	TGAGTGTCAG	TTGAAAACCA	CAGTGAAGT	GCTCCGGGAG	CGCAGCTTGC	360
AGTGTGAGAA	CCTCAAGGAC	ACTGTAGAGA	ACCTAACGGC	TAAACTGGCC	AGCACCATAG	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

GAATTCGGCC	TTCATGGCCT	AGAGTAGCCA	GGGAGCTGGA	AGTTCCACAG	ATTGGTTTTTA	60
ATAAACAAAC	TCCCTCAATG	ATGAGTGGTC	TTTTGAAGAG	CATGGTTAGA	ACTTGGGATT	120
GTGCTTCTCA	TGACTACAAA	TGTACTTGTA	GCTTAGGTGC	AAAAGGGTAG	GTCAGTGGGT	180
AGCTAACTAC	TGAGGATTGA	TTTTCTGAC	GCTGGTGTTT	AAGTGTCACC	CAGAAGTGGC	240
ATATAAAGTG	GCTCATTAC	CCAAGTATCT	TCCTTTCCTT	TTTACAAAAT	CCTTGGCTGT	300
TGTGGGGCCT	ACATCTCTTC	ATGATTATTA	TTGCATCTGG	TGTCATGTTT	TTCCAGCTGG	360
TGTACTGCTT	CCCTGTAGGC	TTCTTGATGT	TCACTCCTCG	AG		402

(2) INFORMATION FOR SEQ ID NO:1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

GAATTCGGCC	TTCATGGCCT	ACTGGTGCCA	CGGGAGGCAG	ACACCAAGTT	CTGGGGTCTC	60
CAGCTGCAGT	GGGTGGCCGC	CAATTGCTTC	TCTCTGTCCA	GACTAATGAG	AACATGGAGA	120
TCACCAAGTGC	ACTGCAGTTG	GAATAGCACG	TAAAGAGGGA	GCTGGGAAAG	AAGCTGGGCA	180
AGCTAAAGGA	CATGGTAACC	CTGCCCCATC	CAAGAAGAGC	TGGAAGGCCG	GCACCAAGCT	240
CTGGGGAGGG	GAGGTGTGAA	GCCAGAGGCA	GCTCCAGCCT	GGGGGACAGG	TGACCCAGC	300
ACCCTCCAGG	GCAGTCTGT	GACTGTTTCT	TGCTTCCCGC	CCTCTGACAT	TTAGTGGTGG	360
GTTCTTCTT	CCTAGGTCTG	GACATCATCA	TCCCAGCTGG	AGTCATGGAG	CCTCCCAAAC	420
ATAGGGAAG	AGATGGTGGT	ATAAGAGGCT	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:1008:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GAATTCGGCC	AAAGAGGCCT	AGGATGGCTG	TGTTTGACGG	GTGTTGCTCG	TGACAGTTGG	60
GGTCCTCCTC	AGCATCAGTC	TTGACATGGC	TGCAACTGGG	GGGGTCCTCG	GGATCCTCCC	120
GGAATCTCTT	CCTCAGCATT	CGCTCATGAT	AAGGTTTCAG	GTGTCTTGAT	GGTTCAGTCC	180
TGGAGAAACA	TAAGCATAAC	CTCTACCCCA	AGTTATTATT	TTACCTATT	CCCAACTTTC	240
TGTTATCAGG	TCTCTCCACC	AAACCAAGTT	TTCTGCTTCT	GTCTTTGCAG	CTGGTTTCTG	300
TAGATGCTGT	TCAGCTGCTG	ATAAGATCCG	GCCTTTAGGC	AGGCTCAAAA	AATTTAAAGT	360
TAATAATGCG	ATTCAATTGC	TTATGGGGTG	TCCTGTAGTA	CCTGTTTTCC	CCCTTTTGCT	420
TCTGCAACTG	CTGTTTCAGG	GAGAGATTCA	TTCTTTCCAC	TATGGCNTGT	CCTTCAGAAT	480
TATATGGGAT	ATCAGTAATG	TGTTTAATAT	TCCGTATAGA	GAAAAATTTA	GCTAGAGCTT	540
GAGAATTAGG	TTCCAATCCT	CGAG				564

(2) INFORMATION FOR SEQ ID NO:1009:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GAATTCGGCC	AAAGAGGCCT	AGAAAAAGAT	GTCATTCCGT	AAAGTAAACA	TCATCATCTT	60
GGTCCTGGCT	GTTGCTCTCT	TCTTACTGGT	TTTGCACCAT	AACCTCCTCA	GCTTGAGCAG	120
TTTGTTAAGG	AATGAGGTTA	CAGATTCAGG	AATTGTAGGG	CCTCAACCTA	TAGACTTTGT	180
CCCAAATGCT	CTCCGACATG	CAGTAGATGG	GAGACAAGAG	GAGATTCCTG	TGGTCATCGC	240
TGCATCTGAA	GACAGGCTTG	GGGGGGCCAT	TGCAGCTATA	AACAGCATT	AGCACAAAC	300
TCGCTCCAAT	GTGATTTTCT	ACATTGTTAC	TCTCAACAAT	ACAGCAGACC	ATCTCCGGTC	360
CTGGCTCAAC	AGTGATTCCC	TGAAAAGCAT	CAGATACAAA	ATTGTCAATT	TTGACCCTAA	420
ACTTTTGGAA	GGAAAAGTAA	AGGAGGATCC	TGACCAGGGG	GAATCCATGA	AACCTTTAAC	480
CTTTGCAAGG	TTCTACTTGC	CAATTCTGGT	TCCCAGCGCA	AAGAAGGCCA	TATACATGGA	540
TGATGATGTA	ATTGTGCAAG	GTGATATTCT	TGCCCTTTAC	AATACAGCAC	TGAAGCCAGG	600
ACATGCAGCT	GCATTTTCAG	AAGATTGTGA	TTCAGCCTCT	ACTAAAGTTG	TCGATCTCGA	660
G						661

(2) INFORMATION FOR SEQ ID NO:1010:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

```
GAATTCGGCC TTCATGGCCT AGGAAAGATT TGA CTGCTTC TCTCATGCAG GGAATAAAG      60
CAAAGGCACG TGCAGAGGGA AGTAGGGGTA GAGAGAGGCA AGTTAGCTTC AGAGAGATTT      120
ATTGCAACCC AGTTCTGTTT TACTCAGCCT GACGTTTTAT CATCTTTTGG AAAAGTGGCG      180
TGAAGTGGTG TGGAACACAT CAGAGGGTGA AGCCGAGCAA ATCTGAAAGA GAGCAGAGGA      240
TTTCATATGA TATCCTATGT GTGCTTTCCC CTTCTTCTT AGGAGCTGGA AGAGGCAGAA      300
TTGATGTCCA CTCGAG                                     316
```

(2) INFORMATION FOR SEQ ID NO:1011:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 244 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

```
GAATTCGGCC TTCATGGCCT AGAAACATGC TAGACATTTT GAAGAACCAG CAAGAATGTT      60
AGTGATGCCA ACAGTGAGGC AGGCAAAGGT GAGTAAGGTA GATTAGTTCA GGAAGAAAAA      120
CATAACATTA TTTAATCCAT TGTGGGCCAC ATTGCACTAT GATAACACTA TCATGTCATA      180
GAGTCTCACC ATTGTTTAAG ATGTTTAAAT TTTTAAATAC GAATATATTC TCACACCCCT      240
CGAG                                     244
```

(2) INFORMATION FOR SEQ ID NO:1012:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 355 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

```
GAATTCGGCC TTCATGGCCT AGCACTTCCC GAGACTCTCT AGCCTTGGAT AAAGAGAGAA      60
TGGATAAAGA TCTGGGATCT GTGCAGGGAT TTGAAGATAC AAATAAATCC GAGAGAAGTG      120
AGAGTCTGGA AGGAGATGAC GAGTCCAAGT TAGATGATGC ACATTCATTA GGCTCTGGTG      180
CTGGAGAAGG ATACGAGCCA ATCAGTGATG ACGAACTAGA TGAAATCTG GCAGGTGATG      240
CAGAAAAGAG GGAGGACCAA CAGGATGAGG AGAAGATGCC AGATCCCTTA GATGTGATAG      300
ATGTGGATTG GTCTGGTCTT ATGCCAAAGC ATCCAAAAGA ACAACGAGGC TCGAG      355
```

(2) INFORMATION FOR SEQ ID NO:1013:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 351 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCC	TTCATGGCCT	ACAGCCTAAA	TGTTTTATTT	CCTGAGAGGC	TGGAATCTGT	60
ATTTGTGGTA	TCAATCAGTC	AACTGAAATT	TATTAAATGC	CTGCTGTGAG	CAAGGCCTAA	120
TGCTGAGGGA	TGTAAAGAAG	AGTGAGAAGC	TAGTCTGGTT	GGGGTNATAT	GACATGGCAA	180
GTCATAGAAT	GAAGAAGCGT	ATTCCTTGTC	ATATGAAAGC	TGCAGATTAG	TGTGGTTCTA	240
AGTAGAGGCC	AGGGTCACTG	GAGTCTAGGA	TTGCAGGGTT	GGCTGGCTTC	CCAGAGGCTA	300
AGAATTTAAT	TTGGATCTTG	AAGATCTGGT	CCAATTCCAA	CANGACTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTA	TTTTTCTTA	TTTCTGCTA	AATTAGAAAG	60
AAATTTGCTG	TTTCAAATAT	ACTCAAGCTG	TTCAGTTCTT	CAACAAAAG	TAGGTGACTG	120
AAACTGTAT	GTTTAACTAT	GCTTAAGTTA	ATATTTATAG	TAATGATAGA	AGCCATTTTA	180
TTGGCAATAT	ATCACTTCCT	GATTTCCACA	CCAGGCATTC	CCACATGCAC	AAACAGGTGT	240
GTGGGAGGAA	GGGAAATGGG	CAAAAATGAT	TTCTTCAAG	AGGCTACTGA	GAATGAAAC	300
TCAAAATCTG	CACAAATAGG	GGTGGTGGAA	GGAGAGAAAG	AAAACCTCCAT	GCCAGAAATA	360
ACATGCTTAG	CAGAGAGAGA	GAGAGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 262 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC	TTCATGGCCT	AACTCAGTTG	GCTTCTAATT	TGCGTAACAA	GATTAAGGTA	60
GTATTTTGTG	ACTATTATTG	GAAGCATGCC	TTCCCTTTT	CACATTATTA	AATTGTATTT	120
ATATTTGTGC	AATTTTAAAC	TATGTTTTCA	AATAAACTTT	GTCTGCGGCT	TCGAGGTCTT	180
TTCAGGAATC	TTTCAAAATG	GGATTGGGG	ATCAGAACTC	CTTCTGATCA	AATGGAATCC	240
AATTTGTACT	ACTGGTCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 304 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

CAGAATGGGA	CTCCAAGCCT	GNCTCCTAGG	GCTCTTTGCC	CTCATCCTCT	CTGGCAAATG	60
CAGTTACAGC	CCGGAGCCCG	ACCAGCGGAG	GACGCTGCCC	CCAGGCTGGG	TGTCCCTGGG	120
CCGTGCGGAC	CCTGAGGAAG	AGCTGAGTCT	CACCTTTGCC	CTGAGACAGC	AGAATGTGGA	180
AAGACTCTCG	GAGCTGGTGC	AGGCTGTGTC	GGATCCCAGC	TCTCCTCAAT	ACGGAAAATA	240
CCTGACCCTA	GAGAATGTGG	CTGATCTGGT	GAGGCCATCC	CCACTGACCC	TCCACACGCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GAATTCGGCC	AAAGAGGCCT	AGTTTAAAGA	AAAAAAAAAA	GACCCATCAA	GGGCATAGAA	60
AAGCTTAGGT	GAAGAAACCC	TAAATGAAT	CCTCATTTAT	CAACTCATTC	ATTATTGAT	120
TCATTTGTTT	ATTCATTTGT	TCACTCAAGA	AGTATTTGTT	GCCAGACACA	GTACCAACAA	180
AGAAAATAAG	CATCCACTAC	GGCTTTGAG	AGCTTGGTAC	GCAATGCCTG	GTTCAAGAGGA	240
GATATTTGTT	CATCGCTTGC	TTTTAACTGT	ATCACAGCCT	AGGGTGGCAT	GCAGAGGTTT	300
GAATAAGTGC	TGAAACAGGA	CAAGTGAGGT	GCTTATGGAA	ACACACAGGC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GAATTCGGCC	AAAGAGGCCT	AGAAGGAAAT	TGTCCCGAAT	CCCTGCAGTC	TTTCTGTAGG	60
TTGCGGCACA	ACGCCAGGCA	AAAGAAGAGG	AAGGAATTTA	ATCCTAATCG	GTGGAGGTCG	120
ATTTGAGGGT	CTGCTGTAGC	AGGTGGCTCC	GCTTGAAGCG	AGGGAGGAAG	TTTCCTCCGA	180
TCAGTAGAGA	TTGGAAAGAT	TGTTGGGAGT	GGCACACCAC	TAGGGAAAAG	AAGAAGGGGC	240
GAAGTGTCTG	TCTTGAGGAG	GTCAACCCCC	AGAATCAGCT	CTTGTGGCCT	TGAAGTGGCT	300
GAAGACGATC	ACCCTCCACA	GGCTTGAGCC	CAGTCCACAC	GCCTTCCTCC	CCCAGCCTGA	360
GTGACTACTC	TATTCCTTGG	TCCCTGCTAT	TGTCGGGGAC	GATTGCATGG	GCTACGCCAG	420
GAAAGTAGGC	TGGGTGACCG	CAGGCCCTGGT	GATTGGGGCT	GGCGCCTGCT	ATTGCATTTA	480
TAGACTGACT	AGGGGGCTCG	AG				502

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

```

GAATTCGGCC AAAGAGGCCT AATCAAATAG TAAAGGCTGT TCTGGCTTTT TATCTTCTTA      60
GCTCATCTTA AATAAGTAGT ACACTTGGAT GCAGTGCGTC TGAAGTGCTA ATCAGTTGTA      120
ACAATAGCAC AAATCGAACT TAGGATTTGT TTCTTCTCTT CTGTGTTTCG ATTTTGTGATC      180
AATTCTTTAA TTTTGAAGC CTATAATACA GTTTTCTATT CTTGGAGATA AAAATTAAAT      240
GGATCACTGA TATTTTAGTC ATTCTGCTTC TCATCTAAAT ATTTCCATAT TCTGTATTAG      300
GAGAAAATTA CCTCCCAGC ACCAGCCCCC CTCTCAAACC CCCAACCCAA AACCAAGCAT      360
TTTGGAATGA GTCTCCTTTA GTTTCAGAGT GTGGATTGTA TAACCCATAT ACTCTTCGAT      420
GTACTTGTTT GGTTTGGTAT TAATTGACT GTGCACGATC TCGAG                        465

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(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

```

GAATTCGGCC TTCATGGCCT AGGATTTCGT ATGCAAGCTC TTGTTTCTCA GGCTGCCTGC      60
AGAAGAAGTC GCTATAAATT ATCTGTTGTC TACATGGTAC AAGGCCCAT TACTCATCTG      120
ATGCTTGTTT TGTTAATTTT TTTAATATTT TTATCACGGG GCAGTGGGAG GGCTTGGGCT      180
TTTAGCCACA GCTGTTTTAA GACTTCTGAT CTCCTGCCCT GCAGGAATAG GTGGCAACTC      240
GAG                                                                243

```

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

```

CTCCACCGAG AGCCTGGACA GTATGAAGGC TCTGACAGCC GCCATCGAAG CTGCAAACGC      60
CCAGATCCAT GGCCCTGCCA GTCAACACAT GGGCAATAAC ACTGCCACCG TCACCACCAC      120
GACTACCATA GCCACCGTCA CCACGGAGGA CAGGAAGAAG GACCACTTTA AGAAAAATCG      180
ATGCCTGTCT ATCGGGATAC AGGTGGATGA TGCTGAAGAA CCTGACAAA CAGGGGAGAA      240
TAAAGCACCC AGTAAGTTCC AGTCCGTGGG AGTGCAAGTA GAAGAAGAGA AGTGCTTCCG      300
CAGGTTCACT CGATCCAACA GTGTGACGAC AGCAGTACAG GCCGACCTGG ACTTCCATGA      360
TAATCTGGAA AATTCTCTGG AATCTATAGA GGACAATTCT TGTCCTGGCC CCATGGCCAG      420
ACAGTTCTCC CGCGATCTCG AG                                          442

```

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAATTCGGCC	TTCATGGCCT	AGATGATCAG	GTTTCTCTGG	ATGGAAATGA	GGTGTATGTA	60
TGGATCTATG	ACCCAGTTCA	CTTTAAACA	TTTGTCATGG	GATTAAATTCT	TGTGATTGCA	120
GTAATAGCGG	CCACCCTCTT	CCCCCTTGG	CCAGCAGAAA	TGAGAGTAGG	TGTTTATTAC	180
CTCAGTGTGG	GTGCAGGCTG	TTTTGTAGCC	AGTATTCTTC	TCCTTGCTGT	TGCTCGATGC	240
ATTCTATTTC	TCATCATTTG	GCTCATAACT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCGGCC	TTCATGGCCT	ACTTTTCCAG	AAACCAAGAG	TGGCTCTACT	GTGGCTATAT	60
TATTATTGTT	ATTATTATTA	TTTGGAGAT	GGGGTCTCAC	TTTGTCTATCC	AGGCTGGAGA	120
GCAGTGGCAC	CATCATAGCT	CACTACAGCC	CCAACTGCT	GTGCTCAAGG	GATCCTCCTG	180
TCTCAGCCTT	CTCGAG					196

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCGGCC	TTCATGGCCT	AATCATTTAT	ATAAAGTTTA	AAAACATTTC	AGAACTGAAC	60
TATATATTTT	TAGAAATATC	TGCATATGCC	ACATAAATTT	TTAAAATCAT	AAGAATGCTA	120
AACAGCACAT	TCAGGACAGG	GTGAAGAAAC	AGGCATGCAG	GTGTGTCAGT	AGGAAGCTGG	180
GTAACATTGT	TCCTTATGGC	TTTGTGTGCG	CTTCCAGAAT	TTCATTAAAA	ACTTTTAAAA	240
AAACATGGGC	CCACATTATG	AATTACGTCT	GCTTTTAGAG	TACTAAAAAC	TCCAAGCAAA	300
AACACATGAG	CCACCGGGCA	CGCCTGGCCT	TTATTTTATT	TTTCTACGTT	ATTATTCCTG	360
TTTTCAGAGG	AGGGAATTGT	CAGGGAATC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

```

GGAGAGCTCT GGGCCAGCCC TTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT    60
CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTGTGTGT GTATATATAT ATATATANAC    120
TTTTCCCTTC TGGATGCAAT AGAGCTATTT TTTTCTCTTT GGAATTGAGT GACACCACCA    180
AGATACGTTT TTGGGTTGAA TATGTGTGTT TTTCAAAATT CAGTCTGGCC TTTTGTGTTG    240
TTGTTGTTGT TGTTTCTTT AGATGGAGTT TCACTCTTGT TGCCCACTCT GGAGTGCAAT    300
GGCACTATCT CTA CTACTGCTG CTACCTCCGC CTCCCAGGTT CAAGCAATTC TCCTGCCTCA    360
GCCTCCCAAG TAGCTGGGAT TATAGGCATG TGCCACCATG CCCAGGCAGT TTTTGTATTT    420
AGTCTCGAG                                         429

```

(2) INFORMATION FOR SEQ ID NO:1026:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

```

GAATTCGGCC TTCATGGCCT AGAGAACTGG AGCCAGCTGT CAACTGCCCC CGCCCCACCC    60
AGGCCATTTG GCTTCTGCTA CCGGCATGCT GCTCAGGGCT CTGCCCAAGG ACAACGACGA    120
GCCCCCTGTG TCCTCTCCTG GGTCACTCTT CATGACCCTG AGGCAGCGAA GACAAGCTCG    180
GCAGCTCCCT GAGCTGCTTC ACACCAACTA CCTATGAGTC TGAGGCCAGC ATCCAGGCGC    240
TGCCAGACC CTGAGAGTCC CTGGACCATG ACGTAGCCTG TGTGTGAAGG GAGCAAGACA    300
GCCTTGACAG AAGCACAGAG AACGCCACTG GGATTCTTAA AGACGCGAAG GGAAAAAGCA    360
CAGAAGATGC TGGCGCTGCA TCTCTCCAG CACCGAGAGG CCTCGAG                                         407

```

(2) INFORMATION FOR SEQ ID NO:1027:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

```

GAATTCGGCC TTCATGGCCT AAATTAATAT CCTTATTTT GCAGATTAGG AAACCTAAGAC    60
GTACTGAGGC TGGGTGCCTG GTTCAAGATC ATATAGCTAA CATTATTGGA CATGCAAATC    120
AAGCCCAGAT TTGTGACTCT GAGCTGATGT TAATTCTGTC ACAATATTGG TTCTCAAGAT    180
AAATCTTCC AGGTGAGGGG GAAAGGGAAT AAATATCTAG AAGTCCCC'T AAACAGAAGT    240
AATTAATTCG TTGCAGAAA TTGGCAAAT TTGGGGTTCC CTTCTTAAAA GTTTCCTTCT    300
GTCACCTGGA AAAAATTTAA AATATGTGCA TTAGGTTGAC AAAGATCAAA AAAGTTAAAA    360
AAAAACCCCT TTTGGAATGC TGTGGAGAAA GTAGCACTCG AG                                         402

```

(2) INFORMATION FOR SEQ ID NO:1028:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

```

GAATTCGGCC TTCATGGCCT AAGGGGCTGA AATTAAGAAT GTGGCTTTT TATCCTTTCA      60
AAAATAGATT ATTTGGCTGG ATGTGGTGGC TCACGCCTGT AATCCTAGCA TTTTGGGAGG      120
CTGAGGCAGG CAGATCACCT GAGGTAAGGA GTTCAAGACA AGCATGTCCT GGTGAAACCC      180
CATCTCTACT AAAAATACAA AAAATTAGCC AGGTGTGGTG GCAGGTTTCT GTAGTCCAG      240
CTACATGGGA GGCTGAGGCA GGAGACTCAC TTGAACCCGG AGTGTCTCGA GGCAGGTCTA      300
GAATTCAATT AGGCCATGAA                                     320

```

(2) INFORMATION FOR SEQ ID NO:1029:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

```

GCAGATTTTC GCTCTCATCC CATATCTATT GAGAATGCTG TAGTTGAGGG TTGTTAGAAA      60
CCTGCATTTT ATTAAATCC CTCCAGGTGA TTCTGATGCA GGCTAGTTCA GTAAACAATA      120
TCAACTAGTT TTCATAAAGA AAACCTCTGG AGGGCCCATTA GTGCCTGCAC TCCAGGTCTC      180
AAAGTATACT TTGAGATCTA GGTATCTGCA CAAGGTGCTA TCCTGAAAGG ACTCTAAATG      240
AGACAACCTCG AG                                     252

```

(2) INFORMATION FOR SEQ ID NO:1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

```

GAATTCGGCC TTCATGGCCT ACCTTATGGC CTAATTAAAT ATTAGTAATA GGTATTCGAT      60
TTGTTTTTAA ATGATTTCTT GTAATAGACT ATTGGGTCAG CTAATACTTT TTGTCATCTT      120
CATATTTTAT GTCATGTTAA TGATAAATTT TCTGACTTTG ATTTGTATGT TTTTGCCCTT      180
TATCCTCTTA GGTGGCCTTG GGGGACTTGC AGGTCTGAGT AGCTTGGGTT TGAATACTAC      240
CAACTTCTCT GAACTACAGA GTCAGATGCA GCATCTCGAG                                     280

```

(2) INFORMATION FOR SEQ ID NO:1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

```

GAATTCGGCC TTCATGGCCT AGAGCAAGTG GTTTTAAAT ATCTTCGAGC TGAACCTGAG      60
GACCATTTATT TTTAATGAC AGAACCTCCA CTCAATACAC CAGAAAACAG AGAGTATCTT      120
GCAGAAATTA TGTTGAATC ATTTAACGTA CCAGGACTCT ACATTGCAGT TCAGGCAGTG      180

```

CTGGCCTTGG CGGCATCTTG GACATCTCGA CAAGTGGGTG AACGTACGTT AACGGGGATA 240
 GTCATTGACA GCGGAGATGG AGTCACCCAT GTTATCCCAG TGGCTCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:1032:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

TAAAATAATT TAACTTTTTT ATTACATTAA AAAACAGGAC TCTGGGAATT GTCACCTTAT 60
 GATCAGCCTT ATATTTTTTC CAGACTGTGT CATTGTGTAT GCCTGTGCCA CCCAACGGAT 120
 GAGACCACTG ATCATGTTTA GCTCAAATTT ATGTTGGATA GAGGTTATAG GATGGTCCTT 180
 ATCTGAATGC AGAAAGGAAT GTTTATTTTG CTGTTATGTT TTATATGGGA TAATACTTTA 240
 TAATTGTGTG ACTATCCTAT TCCCCAACAA ACTCGAG 277

(2) INFORMATION FOR SEQ ID NO:1033:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 298 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTCGGCC TTCATGGCCT AGGTTACATG TATAAAATAA TCGTAGCTGT TAATCAAAC 60
 GATCATTGTC TATTTGTTGT TTCACATGTT TTCATTATT TGTTCATTCA GCAAACACTT 120
 AGTTGTGTGC CAGGAATTAA AATCCAGTGT TGTTCTTTTC TTATTTTTTT TTTGGCTAGT 180
 GGAAAATGAA AACCACTGTG ACTTTGTAAA GCTGCGGGAA ATGCTCATTT GTACAAATAT 240
 GGAGGACCTG CGAGAGCAGA CCCATACCAG GCACTATGAG CTTTACAGGC ATCTCGAG 298

(2) INFORMATION FOR SEQ ID NO:1034:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 339 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCTGGA AGACACTGAC TGACTGGAAG ACCTGGATT CTTTCTGGAA GACACTGATT 60
 GACTGGAAGA CCTGGATTTC TTTCTGGAAG AACTGATTG ACTGGAAGAT CTAGATTTTT 120
 CTGGAAGAAC TAGATTTACT GGAAGACTTG GATTGGTGG AAGACGTAGA TTTTCTGGA 180
 AGACACTGAC TGACTGGAAG ACCTGGATT CTTTCTGGAA GACACTGATT GACTGGAAGA 240
 CCTGGATTTC TTTCTGGAAG AACTGATTG ACTGGAAGAT CTAGATTTTT CTGGAAGAAC 300
 TAGATTTACT GGAAGACTTG GTAGGCCATG AAGGTCGAG 339

(2) INFORMATION FOR SEQ ID NO:1035:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

GAATTCGGCC AAAGAGGCCT AGCACTGTAA AGATGAAGCT GGCTAACTGG TACTGGCTGA	60
GCTCAGCTGT TCTTGCCACT TACGGTTTTT TGGTTGTGGC AAACAATGAA ACAGAGGAAA	120
TTAAAGATGA AAGAGCAAAG GATGTCTGCC CAGTGAGACT AGAAAGCAGA GGGAAATGCC	180
AAGAGGCAGG GGAGTGCCCC TACCAGGTAA GCCTGCCCCC CTTGACTATT CAGCTCCCGA	240
AGCAATTCAG CAGAGATCTC GAG	263

(2) INFORMATION FOR SEQ ID NO:1036:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

GAATTCGGCC AAAGAGGCCT AAAGCACCCG CTTCTCACC ACCCCCACTG TTGGGCCTAT	60
AGTAGCAGGT TAGTGAGTAC CTAGGGCGGC TCAACTCCTC CCACAGCACC AACCCAGCAT	120
GGTCCCACTG AAGTCCTACT ACGCCCTCCC CTCGCCAGCC TTTTCCAGAA ACCATACTGG	180
GCTCAGATCA GAGCTCCGAA GCGGTCAAAG TGAGCTGAGC AGGACAGGCC CAGCCTTTCT	240
CCACTGCCAC GTCACCCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1037:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

GAATTCGGCC AAAGAGGCCT ACGGAGCTGT CAGCCAGGGG AGTGGGGTCA GCCGTCAGCC	60
AGCCCTCCCG TTTCCCGCCC GTGGGCCCTG ACCCACTCC CTTTCTAGA AGTCAATCCT	120
AAGGTTTCTC TGCTCTGGCT AAGAGGATGT AAATTTGGAT TCTTAGAGGG CATGGCACCC	180
CCAGTCCCTG CCCAGATAAA GTAGCACAGT GGCATGCAGC ACCTCTGTCT GTTGCTGACG	240
TTGGGGGGCT TACACACCA CCTCATCTCC GTGCACAGAC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:1038:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

GAATTCGGCC	TTCATGGCCT	AGCTCTGCAA	GGAAGAGAGC	TTCACGTCTC	TGGTCAGCCA	60
AGCGAGGCTG	TCTCTCCAGC	TCTCAGAGAG	CTCTCGGGGC	TCTCCTGCAG	GAGACCAGGC	120
CAATGCTCCT	GTGCTTCCTG	GGGCCAGTAG	CAGCACCCCTG	AGTCCCCTGC	CACCAGLCAG	180
CTGAAAGGCA	TAGCGTGAGG	TGCTTCTCTC	AGTCCCAATT	ATGACAGTGG	CCACCGGAGA	240
CCCAGCAGAC	GAGGCTGCTG	CCCTCCCTGG	GCACCCACAG	GACGCCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

GAATTCGGCC	TTCATGGCCT	AACTCTACAG	CAGTGCTTAT	TTTTACATTT	CCAAGCGAAT	60
ACCAAAACCT	TCAGCAAAGA	TTGGGTTGGT	ATTAACGGGT	TTTTGTCTCA	GAAGTGTATT	120
GTGGATCCCG	GAGTTTCCCC	CAAATCCATC	TACATCAAAT	TTGTAGAAGT	AGAGAGGGAT	180
TTTCTTTCCG	CAGGCTCTTT	AGTTGAGTGC	CTGGAAAAAG	CCATTGGATA	CCCCTTAAAA	240
TTTAACAAGT	GAATGTCATC	CTTCATAAGG	ATTTGGGCTC	TTAGCTCCTT	CTTCTCTACT	300
CACCTCCCAT	TACCCGGACC	ACCCCTCATC	CAGATGCCGC	CGTCAGACTC	TTCATGGAAA	360
CCCTTTCTTC	AATTGGGCCA	GTACGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

GAATTCGGCC	AAAGAGGCCT	ACCCTACTGT	GACACACCTA	CCATGCGGAC	ACTCTTCAAC	60
CTCCTCTGGC	TTGCCCTGGC	CTGCAGCCCT	GTTCACTACT	CCCTGTCAAA	GTGAGATGCC	120
AAAAAAGCCG	CCTCAAAGAC	GCTGCTGGAG	AAGAGTCAGT	TTTCAGATAA	GCCGGTGCAA	180
GACCGGGGTT	TGGTGGTGAC	GGACCTCAAA	GCTGAGAGTG	TGGTTCTTGA	GCATCGCAGC	240
TACTGCTCGG	CAAAGGCCCG	GGACAGACAC	TTTGCTGGGG	ATGTACTGGG	CTATGTCACT	300
CCATGGAACA	GCCATGGCTA	CGATGTCACC	AAGGTCTTTG	GGAGCAAGTT	CACACAGATC	360
TCACCCGTCT	GGCTGCAGCT	GAAGAGACGT	GGCCGTGAGA	TGTTTGAGGT	CACGGGCCTC	420
CACGACGTGG	ACCAAGGGTG	GATGCGAGCT	GTGAGGAAGC	ATGCCAAGGG	CCTGCACATA	480
GTGCCTCGGC	TCCTGTTTGA	GGACTGGACT	TACGATGATT	TCCGGAACGT	CTTAGACAGT	540
GAGGATGAGA	TAGAGGAGCT	GAGCAAGACC	GTGGTCCAGG	TGGCAAAGAA	CCAGCATCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCGGCC	TTCATGGCCT	ATAGAAACAT	CAGTGGGCAC	ATTTACAACC	AGAATGTATC	60
CCAGAAGGAC	TGCAACTGCC	TGCACGTGGT	GGAGCCCATG	CCAGTGCCTG	GCCATGACGT	120
GGAGGCCTAC	TGCCTGCTGT	GCGAGTGCAG	GTACGAGGAG	CGCAGCACCA	CCACCATCAA	180
GGTCATCATT	GTCATCTACC	TGTCCGTGGT	GGGTGCCCTG	TTGCTCTACA	TGGCCTTCCT	240
GATGTGGTG	GACCCTCTGA	TCCGAAAGCC	GGATGCACAC	ACTGAGCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAAGAAAAGC	AGAAAGAACT	GGCAGAAACA	GAACCCAAAT	TCAACAGTGT	GAAAGAGAAA	60
GAAGAACCAG	GAATTGCTAG	ATTGGCTCAA	GCTACCCAGG	AAAGAACGGA	TCTTTATGCA	120
AAGCAGGGTC	GAGGAAGCCA	GTTTACATCA	AAAGAAGAAA	GGGATAAGTG	GATTAAAAAG	180
GAACTCAAGT	CTTTAGATCA	GGCTATTAAT	GACAAGAAAA	GACAGATTGC	TGCTATACAT	240
AAGGATTTGG	AAGACACTGA	AGCAAATAAA	GAGAAAAATC	TGGAGCAGTA	TAATAAACTG	300
GACCAGGATC	TTAATGAAGT	CAAAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 268 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GATGGCCACT	TCCCAGGCTG	ACATAGAGAC	CGACCCAGGT	ATCTCTGAAC	CTGACGGTGC	60
AACTGCACAG	ACATCAGCAG	ATGGTTCCCA	GGCTCAGAAT	CTGGAGTCCC	GGACAATAAT	120
TCGGGGCAAG	AGGACCCGCA	AGATTAATAA	CTTGAATGTT	GAAGAGAACA	GCAGTGGGGA	180
TCAGAGGCGG	GCCCCACTGG	CTGCAGGGAC	CTGGAGGTCT	GCACCAGTTC	CAGTGACCAC	240
TCAGAACCCA	CCTGACGCAC	CCCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 391 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

```

GTCATTGCAT CCAAGATAAT GAAATATCTA TAACCCCAAA AGTTTCCTGT GTECCCTTGT      60
TATTCATTGC CCTGCCCAGT ATTCAGGCAA CACGGATCTG TTTTCTGTTT TAGGTTAGTT      120
TGCATTTTCT ATAAAGTCTT ATGAATGAAA TAATAAAATG TGGACTATTT TCATGGGCCC      180
GGGAGCAGTG TGGCTTCTTT CATTTCAAAT GATTGTTTGG AAATTCATCC ACAGCGTTGC      240
ACGTATCAGT AGTAGATTCC ATTTGATTGT TGATTTGTAT TCTATTGTAT GCCTGAGTCA      300
AAATTTATTC ATCTCTTTGT CTGTTGATAG CCATTGGGT TCTTCCAGTT TGGGGCCATT      360
ACAAATAGAG GTACTATGAA CTTTCTCGA G                               391

```

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

```

GAATTCGGCC TTCATGGCCT AATGTGAGCC ACCGCACCCA GCCGAATATT TGTACTTTGT      60
ATAAATTCAT TGTCTGTTT ACAGTTTGAA TGGCTCTTT ACCCTGGCAT AATTTTGTA      120
CGTGTGGAGC ATTTGGAAAA TTTTATTGG ATTATGCAGA TATTTCAAT GCTGGTATTT      180
CATTATATGA TAGTAAAAA TCACTTTTG TTTTGTGTTG TTTTGTGTTAT TTTCTTTTT      240
TTTTTGAGGC AGAGTTTCGT GCTTGTCGCC CAGCCGAAGG CGCTCGAG                288

```

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

```

GAATTCGGCC TTCATGGCCT AGTAACTTCA TAACATTGCT GGTGTTGAGG TGAATCTTAG      60
TGGTCATCCA GTCCCAAGGC ATCCTTGCCA GCCCCCTACA ATACCTGGAT GGGCGCTTAT      120
CTTCAGGTAG GCCTGAGCCT TTCTGGTAAA GAGGAGCTCA CTATTTCTAA AGGAAACCTG      180
TGCCATTGGG TTAAAAAAGT ATTAATTTT AAACATTGGT AGTTGTTAAG CAGTTGTTGA      240
ATATTTTGAG CCAAATTTG TTACCTCCA TACCTCGAG                279

```

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:


```

GAATTCGGCC TTCATGGCCT AGCAGCATTC AAGGAATTAA TATTAGTCAC TGAGAACAAA      60
AAGCGAAATT AGAAAATTTT AAGTCACTTC TAGGCTTGTA GGGGAGAAGA CGTGTAGTGA      120
TGAATTCTAT CATTATGAA GTACCCACTG GATCCACAC ACTGTGCAAG ACCTTTAGAT      180
CAGGCGCCTC CCTCGGTTTT CTTACCCCTG TGCAGCAGGT GCTGTTATTT CCTTTTAA      240
ATTATTATT ATTATTATTA TTTTGTGAGA CAGGATCTCC CTTGTCACT CAGGCTGGAA      300
TGCAAGGCA TGATCACTGC TCACTGCAGC TTCGACCACC CGATCTCGAG      350

```

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

```

GAATTCGGCC TTCATGGCCT AAAGCTTTTC AGTACTGTTT ACAAATTTGG TTTTATTGTG      60
TCAACTTAAA AGCATGAGTC TAAATCTATT AGTCATACCA AATGTTTCA TTTTATTTTA      120
TTTATAGAG ATGGGGTCTT GCTGTATTGC CCAGGCTGGT CTCAAACGAC TAGGCTCAAG      180
CGATCCTCCC ACCTCAACCT CCCAAAGTGC TGGGATTACA GGTGTAAGCC ACCATACACA      240
GTTCTCAAAT TATTTTATAC AATACAAACA TTAAATAT AAATCATGCA CTCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

```

GAATTCGGCC TTCATGGCCT AGAGCTTTGG TGCTTTTCAC ATAAGGAACT TACTTGGGCT      60
AAAAAGTAAC CTCAGAGAAA CAGTGCTCCC ATTTGGTGA TAAGGAACT GAGGTTCCAA      120
ACATGAGATG TAATAGCTTG CCCCAAATCT AGCCAGTGAG CAAGAGAGTA GACTTTTGCC      180
TGTGCCAAA CAGTAATCAC CATCCACAAG TGGCTATTTA AATTTTAATT ATTACAATTA      240
AATAAAGTTT AAAATCCAGT TCCCCAGTCC CACTGGCAAC TTAACAGCTA CCAGTGACTG      300
TACCATATAT AACAGCATAT ATAGACATAC AGCATATACA ACACATACAT AGGGATTCCC      360
ACTCGAG      367

```

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

```

GAATTCGGCC TTCATGGCCT ACAATTTTAA AATTAAAATT TTTTCTATTT TTTTGCAATT      60
ATCAACCTAA CACATTGAAG AAAGTTGGGA AATATAGAAA AAACACACCA AAAAGTATCA      120

```

```

GAGTTACACT AAAATGTTCA TAGTCAGTAA TATAGTCTTT CAGATTTTTT TTTCTGTGTC      180
TGTCTGCTGT CTATGTCCAT GCCTACCTTA CTTTCTTCCC TCTCTCTTCC CTCCCCACCC      240
TCCCTTCCTT CCTTCCCTCC TTCCACCTT CCCTGCTTCC TTCTTGCTG CCTCCCTTCC      300
TGCCTGCCTC CCTTCTGCTC ACTTACATTC TGTTAACAAT GAGAAAAAAA TTCCCCCATC      360
ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1051:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

GAATTCGGCC AAAGAGGCCT AAGAAGACCT CAGCCTTCGC CTGAAAAAGC TGAATCAGCG      60
TGCCCCCTGC ATGCTGTT A TGAAGGGAAC ACCTCAAGAA CCACGCTGTG GTTTCAGCAA      120
GCAGATGGTG GAAATCCTT ACAAACACAA TATTCAGTTC AGCAGCTTTG ATATCTTCTC      180
AGATGAAGAA GTTCGACAGG GGCTCAAAAC GTACTCTAAT TGGCCACCT ATCCTCAGCT      240
CTATGTTTCT GGAGAGCTAA TAGGAGGACT TGACATAATT AAGGAGCTGG AAGCATCAGA      300
AGAGCTGGAC ACGATCTGTC CCAAAGCACC CAATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1052:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

```

GAATTCGGCC TTCATGGCCT ACTATGGACA GCCACAGNTC TTCCAGGAC AAGACCCTGA      60
CTACCCCCAG CATGGAAACT ACCAGGGAGG GAGGGTCCCC CATCCTACTA TGACAACCAG      120
GACTTCCCTG CCACCAACTG GGATGACAAG AGCATCCGAC AGGCCTTCAT CCGCAAGGTG      180
TTCCTAGTGC TGACCTTGCA GCTGTCGGTG ACCCTGTCCA CGGTGTCTGT GTTCACTTTT      240
GTTGCGGAGG TGAAGGGCTT TGTCCGGGAG AATGTCTGGA CCTACTATGT CTCCTATGCT      300
GTCTTCTTCA TCTCTCTCAT CGTCCTCAGC TGTGTGGGG ACTTCCGGCG AAAGCACCCC      360
TGGAACCTTG TTGCACTGTC GGTCTGACC GCCAGCCTGT CGTACATGCT GGGGATGATC      420
GCCAGCTTCA ACAACACACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:1053:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```

GAATTCGGCC AAAGAGGCCT AGATATTCAT TTCCATTGGA GCTGGTATTT TTAAGGTCTC      60

```

GTGACGTCAG	TGACCTCATT	TTACTTGATC	TATTAGCAGC	ATTTCATACA	GTTGTTGACT	120
CTTCTCCATT	AAAACATTTA	CTTTATTGG	CTTCTAGGAA	ACATATTTC	CTGCTTTTTC	180
TTCTTATTTT	TCTGACTCTT	TTCTCAGTTT	CCTTTGCTGT	TTCTTTTCT	ATCCTCTAAA	240
CATTGAAATA	TCCTAAGCCT	AGTTTGGGAT	TCCTTGATG	GTCTTCATT	CTTTAATGGG	300
AACTGTGCTG	GTGACTCAA	TTTATATCTC	CAGCCAGAAC	CTTTCTCTG	AATTCCAG	358

(2) INFORMATION FOR SEQ ID NO:1054:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 386 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

CCTTCATGGC	CTACTTCTGG	TATTACATCA	CACTGATCAT	GCTGCTGGTG	GCCGTGCTGG	60
CCGGAGCTCT	CCAGCTGACG	CAGAGCAGGG	TTCTGTGCTG	CTTCCATGC	AAAGTGGAAT	120
TTGACAATCA	CTGTGCCGTG	CCTTGGGACA	TCCTGAAAGC	CAGCATGAAC	ACATCCTCTA	180
ATCCTGGGAC	ACCGCTTCCG	CTCCCCCTCC	GAATTCAGAA	TGACCTCCAC	CGACAGCAGT	240
ACTCCTATAT	TGATGCCGTC	TGTTACGAGA	AACAGCTCCA	TGGTTTGCA	AAGTTTTTCC	300
CCTATCTGGT	GCTCTGCAC	ACGCTCATCT	TTGCAGCCTG	CAGCAACTTT	TGGCTTCACT	360
ACCCAGTAC	CAGTTCCAGG	CTCGAG				386

(2) INFORMATION FOR SEQ ID NO:1055:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 104 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

CGATTGAATT	CTAGACCTGC	CTGTGCTCCT	CGATGGTGTC	TCTCCCTCCA	GAAAACGCAT	60
GCTTATTGAC	CTTGGTTTTG	ATCTGCTTGG	CCGTGTCGCT	CGAG		104

(2) INFORMATION FOR SEQ ID NO:1056:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 650 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

GAATTCGGCC	AAAGAGGCCT	ACACAAGGCT	AAGGGTATTG	GATATAACGG	AAAGTGGAAG	60
CTATACCTGA	CTTCCAGAGA	ATGTGGACCG	GATATAAGAT	CTTAATCTTC	TCTTATCTTA	120
CTACAGAAAT	CTGGATGGAG	AAGCAGTATT	TATCTCAAAG	AGAAGTGGAC	CTAGAGGCTT	180
ATTTCACTAG	GAATCACACC	GTTTTGCAAG	GTACTCGATT	CAAAAGAGCC	ATTTTCCAAG	240
GGCAATACTG	TAGAAATTTT	GGCTGTTGTG	AAGACAGAGA	TGATGGCTGT	GTCACTGAGT	300
TCTATGCGGC	GAATGCGTTG	TGCTACTGTG	ATAAATTCTG	TGACAGAGAA	AATTCTGATT	360

GCTGTCCTGA	CTACAAGTCC	TTTTGCCGTG	AAGAGAAAGA	ATGGCCTCCT	CACACACAGC	420
CTTGGTATCC	AGAAGGTTGC	TTCAAAGATG	GTCAACATTA	TGAAGAGGGA	TCAGTAATTA	480
AAGAAACTG	CAACTCCTGC	ACATGCTCAG	GACAGCAATG	GAAATGTTCC	CAGCATGTAT	540
GCCTTGTTCC	TCCAGAATTA	ATTGAACAGG	TCAATAAAGG	AGACTATGGA	TGGACAGCAC	600
AGAATTACAG	CCAATTTTGG	GGAATGACTT	TAGAAGATGG	ACTCCTCGAG		650

(2) INFORMATION FOR SEQ ID NO:1057:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 378 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

GAATTCGGCC	AAAGAGGCCT	ACACGTATTG	GCCAGGATGG	TCTTGATCTC	CTGACCTCAT	60
GATCCGCCGG	CCTTGGCCTC	CCAAAGTGCT	AGGATTACAG	GCGTGAGCCA	TCGCGCCCA	120
CTGAGAATAG	TTTAAAGAAT	TGGTTGAGAG	GCAGTTGCTT	TTTCTTTGAA	TATCTAGAAC	180
TGTTCTGGAC	TAACGTCAAA	GAAACACCAT	GGCAACATTA	AAGGGAAGAT	TATTTGAGAG	240
GCGGGGGATA	GTATGGCTTA	GGACTTGGGC	TGCTACCTTT	GACTTTGTAA	TTCAAAAGAT	300
TGTAATGTTT	CATATTTTCA	ATCTGATCAT	TAAAAATATC	TGTGTTACAT	GCAAAAAAAA	360
ACCTATAGGC	AACTCGAG					378

(2) INFORMATION FOR SEQ ID NO:1058:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC	TTTATGGCCT	AATTTTAACA	TTTACATAGA	CAATTCATTT	GGTGTTTTGT	60
CTCCTAGTTA	TTTGGCCCAA	TCTCTGATGA	TTTCCACTCT	GTCTTGCCCA	CTCACTCCGT	120
TTGTCATATC	TTGGCCATTA	TCATCACCTC	AAATTGCTCC	ATCTTCAAAA	TACTTGATC	180
TTATTTATTG	ACCATATTCC	TTCCACTTGG	TTTATTGAAC	TATTCCTCT	ATCATTCTCT	240
GATTTCACTG	CAGCCAATG					259

(2) INFORMATION FOR SEQ ID NO:1059:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAAAAAACT	ACTAACCCT	GCAAGCTCTT	GTCAAATTTT	AGTTTAATTG	GCATTGCTTG	60
TTTTTTGAAA	CTGAAATTAC	ATGAGTTTCA	TTTTTTCTTT	GAATTTATAG	GGTTTAGATT	120
TCTGAAAGCA	GCATGAATAT	ATCACCTAAC	ATCCTGACAA	TAAATCCAT	CCGTTGTTTT	180

TTTGTGTTGT TTGTTTTTTC TTTTCCTTTA AGTAAGCTCT TTATTCATCT TATGGTGCAG 240
CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1060:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGCC TTCATGGCCT ACGAGAGTAT ATTGGTAGGG CTGGAATTTC TGGTTCATAT 60
GGTAACTAAC TCTATGTTGA ACATTTTGAG GAGCCCTCTC GAG 103

(2) INFORMATION FOR SEQ ID NO:1061:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

GAATTCGGCC TTCATGGCCT AAAAGGTTAG GCAATCACTG GGACCCGCAT GGTGTTCCCTC 60
CAAAGAATAG GGTAAAGGAG AGCTGGGAGG GAGCCCTCTC CGTTGGGTGA CTCTTGTTGTG 120
CCCTTTAGAC AGGCTGGCCT GCCGGTTCCA CAGGGTACAG TTAGGACTTG AGTCTTTCTT 180
TTTCTGTTTT GAGTTGGTGA GTGAGTGATA GGGTAACATG GGCCTTCAGG ATGACCCCTT 240
GGAAGTGTGC CGAGTTCCTT AAATCTCAGC TGGGATCCTG GACCTGGGAG GCCCCTGTGA 300
GGGCCAGCTC TGGAAAAACC TGGGAGTTGA TGCCGGAGGC TGTGGAAGAA CTCTGCTCGA 360
G 361

(2) INFORMATION FOR SEQ ID NO:1062:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

GAATTCGGCC TTCATGGCCT AAGAAAAATT GGGAACAAGC TAAGTGCCCA CATAGTTACA 60
AAAATTACGT TAAATAGATA CACGGTTGCT TTAAAGCTCC ACATACAGCA CCATAGAGCT 120
TTTTATATAT TTGTAGGCAT TAAAGCAATT CCAGGAAGGA TCTAAACCAA ACACTTGACC 180
CAGGTTGTCT CTCTGGGGAG TGGAGCCACA TGGGATTTC A CTGTTTCTGT ATTCTTATTA 240
CTTATATTAA AACACACATG AACAGAAGAA AAAATAGCCC CAGTATCTCG AG 292

(2) INFORMATION FOR SEQ ID NO:1063:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

```
GAATTCGGCC TTCATGGCCT ACCGTTGTTA CACTTCTGGA CACAAGTTGG GCCGAAGTAA      60
GCCAAGCCCA GTCCTTCCTG TTTCTTTCT CAGGAAATGT GACCACGTGC ACTGGGAAGC      120
TTTGTGTAAA GTAGATAGGG GTATGAGCCA ATTGCCCAGC ATTGGTGTTT TGTTTTTTGT      180
TTGTTTGT TTGTTTGT GTTTTCACAG AGTCTTGCCC TGTCACCCAG GCTGGAATGC AATGGCGTGA      240
TCTCAGCTTA CTGCAACCTC TGCCTCCCAG GTTCACACAA TTCACCTGCC TCAGCCGCCT      300
GAGTAGCTGT GATTACGGGC ACCGTCTCGA G                                     331
```

(2) INFORMATION FOR SEQ ID NO:1064:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 136 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

```
CGAGTGTTAC ATTGTTCTT CCGCTCAAAT CCTGATCTGG TCCATTAAAG AGTGTTTCGCA      60
GACAAAGTTT CTGAAAGATT AGAGAAGAAT CCCCCAAGAA TCAATTACAA CCAAATGGA      120
AAGGGACAAC CTCGAG                                     136
```

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

```
GAATTCGGCC TTCATGGCCT AGAATAAAGG AAAATTCAGG TCATAGATTG AGTGCTATAT      60
TTGAAGTAAA TACAGACCTT CAAAAAATA TAATATCAA AATCACTGCT GAGCTCTCCT      120
GGCCTTCCAT ACTTAGCTCA CCCCAGCACT TGAAATTTCC ACTTACTAAT ACAAACTGCT      180
CCTCAGAAGA AGAGATTACT TTAGAAAATC CTGCAGATGT TCCTGTCTAT GTTCAGTTTA      240
TTCCTCTGGC TCGAG                                     255
```

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

GAATTCGGCC	TTCATGGCCT	ACAACCTGCT	TTCCACCTTC	TGTAATCTCC	CATCAGTGAT	60
AAATTACCCA	TCAGCTTTCC	AGATTCCAGA	ATTTTGCTGA	CATCTCCTGT	TGGCTATGTT	120
CTTATTTCTT	TTTCTGTTTA	TTCTGTGAC	CTTGTGCCCT	TTAATTCTTT	CCCATAATTT	180
GTTGGGACTT	CAGAAGGAAG	TGGAGCTAAA	GGCATGTGTC	TGCCTGCCCC	ATCTTGCTG	240
GAAGTTGGGA	AGGCCTTCCT	TCCAAGGCAC	CCAGCATAGC	ACCTGGCACA	TGATGGATGC	300
TCAGCAAATG	TCTGTGGGTC	TTCTTTTAC	TAAACAGGCA	GTTGATTTC	CCAGAAGTAG	360
TGACCACCTA	AGTCTCGAG					379

(2) INFORMATION FOR SEQ ID NO:1067:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

GAATTCGGCC	TTCATGGCCT	AACACAGCTC	ACATCAGAAT	ATAATAGTGG	AACTAGGGTG	60
ACTTCACTCC	CTTTCACCTG	ATGTCTATCT	TGGCCTTTTA	GCACCTTGAC	TATCCCTGAA	120
AAGACTGGGT	CTTTGTTTTC	CCAGGGAAAA	AACGAAGTGA	TGTAGATCTA	AGAAATAGTG	180
CCTCTTTAAT	ATTTAATCT	TACATGACAA	CTAACACACA	GGGAAAAGGC	TATGTTAAGT	240
TGATTATAGC	TCCTCTTAAA	ATGTCCTATG	CTGTCAAGTG	GTCTTAGAGA	CATGGGAATA	300
ACCAAGCAAT	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1068:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

GCGATTGAAT	TCTAGACCTC	ACCTCTGATC	TATCTCTTTT	ACCTCAGCAA	TTTATTTCCC	60
AATTATTATA	TCTACTTTAT	TGTTCTTATG	AGACAATAGA	CTATGATAAT	TTTCCAGAAA	120
TAATTTTGTT	TTCTTCCTCC	CATCTTCTAA	TGTTGAGACC	GTTTCTCTGT	TTTCTTTTCT	180
CTCTACCCCT	CAGTCTCATA	GGTTTATTTT	TCATTTCCAA	TCCAGCGATT	TCAAAACCTG	240
TACAACAAAC	CAACTCAGCA	GCCCTTGGCA	ACTTGAGGAG	ATTTACAAA	CCACTCGAG	299

(2) INFORMATION FOR SEQ ID NO:1069:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

```

GAATTCGGCC TTCATGGCCT ACCATTCCA CAACCATTTT AATCTGCGCA TCGGTCCCAG      60
ACGTAGGGAT TCCTCGTCTC ATCTTGAAA CATTGCCAGC AGTGGTCTG ATTGGAAGC      120
CTGCGTCTGT CACGTGACAC CGTCTGAGCC TGTGCTGCC TCTCTTTCTT CCGGCAGTGC      180
CCTGTACTCT GTGGGGATGA CGGCAGTGGG CCTGGCCATC CTGTGGTATG TTTCCGTCT      240
GGCCGGGAGA CTCGAG                                         256

```

(2) INFORMATION FOR SEQ ID NO:1070:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

```

GAATTCGGCC TTCATGGCCT AGCCATCATG TTTATTAGAA GGTGGATT TGGTGTGTGC      60
TCTAGACAGA TACAGAATAA ATACCTGCCG CTTGAGAACA GGAAGTCCAC GATTCATACA      120
AAGTGCTCAC TACAGGAAGT TGCTGTGTCA AAATCCAGGC AAGGACCCAA CTCCGGGCAG      180
CCCCTCCTCC CTGCTGACCT CAACAAGGGC TGTGCTATTG TTTTTATT TATTATTTTA      240
TTTCTCTTTA TTATTATTAA TATTATTATT ATTTGCTTTT GCTGTGGTCA CTATCATTGG      300
CAAAGTTCCT TTTCCCTCGA G                                         321

```

(2) INFORMATION FOR SEQ ID NO:1071:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```

GAATTCGGCC TTCATGGCCT AGGGAGGTAT TTGTCATTGT GAAAAGCTGG GAATCTCAAA      60
CATAGTCAAC TTAACATAAA AGAAGCTAAT ACAGGTGAG CATTCTAAT CCAAAAATCC      120
AGAATCCAAA TTGCTCAAAA ATCTGAAACT TTCTGAATGC TGACCTGATA CTACAAGTAG      180
AAAATTCCAC ATACAAGTAC TTAACACAAA CTTTGTTTCA TGCACAACT ACTAAAAATA      240
TTGTATAAAA TTAACCTCGA G                                         261

```

(2) INFORMATION FOR SEQ ID NO:1072:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```

GAATTCGGCC TTCATGGCCT ACTTGGGCTC ATTTTATTG GTGAATTGA TCCTGGCTGT      60
GGTGGCCATG GCCTATGAGG AGCAGAATCA GGCCACCTTG GAAGAAGCAG AACAAAAAGA      120
GGCCGAATTT CAGCAGATGC TCGAACAGCT TAAAAAGCAA CAGGAAGAAG CTCAGGCAGT      180
TGCGGCAGCA TCAGCTGCTT CAAGAGATT CAGTGAATA GGTGGGTTAG GAGAGCTGTT      240

```


GGAAAGTTCT TCAGAAGCAT CAAAGTTGAG TTCCAAAAGT GCTAAAGAAT GGAGGTCCTT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:1073:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 397 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

GAATTCGGCC TTCATGGCCT AAAAAAGCTA ATGTCATAGG TCTTTATATG TGGGCAGGGT 60
 TTATAAGTTG TCTPAAGGGC CATCAGGTAG AGTTGGCCTT TTCTGTTGAG GTCCCTTAAA 120
 TTTCAGTGGA GGTCTTCTCT TTGGGGCCAG TTTCTCTAGA AACTGGGTC CTGATAGTAG 180
 GGTAAGAAAA GACAGCTGAG GACCCCAAGA TTTGTATGAT GACTTTTACT TAATCCCTCT 240
 ATCTTCATCC TCTCTCATGC CCATCCGGCC CCACCCCCCA AATCCTCCTC TGGCTGCTGA 300
 CCCTCAGGTT CAGTTTTTCC TGTCACTGGA GGTGAGGGT GGGCGTAGG CTGGCTGTGG 360
 AGAGTAGGGG AGAGGACCTG GGTCCAGTA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:1074:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

GCGATTGAAT TCTAGACCTG CACCACTGCG ATCCCTACGC CTGAGGAAAT GACAAGATTG 60
 AGAAGCATGA ACAGACAACT CCAGATAAAT GTTGACTGTA CACTGAAAGA AGTTGACCTC 120
 CTTCAATCTA GAGGAAACTT TGATCCAAA GGCATGAATA ATTTTATGA CAACATAGAA 180
 CCTGGCCAG TTGTACCACC CAAGCCATCT AAAAAAGACT CCTCAGACCC CTGCACAATT 240
 GAGAGAAAAG CCCGAAGAAT TAGCGTGACC TCCAAAGTAC AGGCAGACAT CCATGACACC 300
 CATCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:1075:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

GAATTCGGCC TTCATGGCCT AGAAAACTAA ACATTGCTT TTTATAAAGA CTGACAAAAT 60
 ATAAATCTTT ATTCTAACCC TATCCCCAAA ACTAGCCAGG CCACACCCCA GATGTTCTTA 120
 TTGACTATTG GGAAGATAGA AAAGGCGTTG TGTTTTTGT TTTTGTGTTG TTGTTGTCAT 180
 TGTTGTTTTT TCAGAAGACC AGTGTCTCAG TTCTGTCTTA GTAGTACCAC ACCACGACTC 240
 GAG 243

(2) INFORMATION FOR SEQ ID NO:1076:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 598 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```

CTCGAGCTGG GGGCCACTTT GGCACCTAAC AAAACCAGAG AAAACAAGTG CAACTAAGCA      60
AGCAACTATG CACATTCCAG ACATAAAGAT CATTAAATAA CGCCTTAATC TAAGGATCTG      120
TTGGTTCTAA CGCCAGAAAA AGAAGTTAAA TTTTAAAAAA TATCTAAAAG AGATTTTAAG      180
TGGGCAAGCA ATAGAGAAGA TACCCAACAC TGAGAAACGG AAAGGAAAAA AGACCACCCT      240
AATAACTACT GTCATCAAT ATACATCTAT AATTCTACCA GAACAGTATT AAGAAATGAG      300
AAACGCCAAT ATTACATAAA ATAAGGTAAA AATAACTAAG CATAGGTTAG TGTGAGGGGA      360
CCTAGGGTTC AGACACCCAG AGTTTTATAT AAGGATAATT TGTCCTGAAT CAAGACCACA      420
CTGTCCTCTC CTAAACCTA ACTGCTACAA GCAGACACCA CCTCTTCTGA CTGGGCTGAA      480
GTGTGGGAAA CAGTCCAAA ATTAGGTATC ACACCATAAA CCTCCACAA GAGCAACCTT      540
TGCTCTCAAT TAAGTTGTTG ACAAATAAT TCTCAACTTG CCTAGGCCTG CCGAATTC      598

```

(2) INFORMATION FOR SEQ ID NO:1077:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

```

GAATTCGGCC AAAGAGGCCT AGGTGGGTAT TTGAATGGTT TTGCTCCAAA ATTGAACTCA      60
CATTGTTGAT ATGACATGAA ACTAGCTGCA GCAAAAAATC CAGATACAGT AGATGAAAAG      120
ACTTGCTTTT CAGGAGGCAG CTGGTTGCCA TTTAAAAAGA AGATCATTTC CTTTTCATTC      180
AAGTCTAACA GAAATCCTAC TGTATCTCCT TCTTCCAGC ATGGGTGTAT GTGAGGCTTA      240
CTTCTGGCAT TGTACCAAAT CAGCTGCCGG CAGCCATCAT ACGCACAGGA GTATTTCATCA      300
TCCCAATGC CGTAGCCTTC ATGATTGAGG AATTGCTGT CTGAG      346

```

(2) INFORMATION FOR SEQ ID NO:1078:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 419 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

```

GAATTCGGCC AAAGAGCCTA GCTCCTGTTA CCATTATTAT TATTCATACT CATATTCATT      60
ACTTCTAACT TCAAGTGGGC CATTAGCACT AACTGGCATA CCACACTTCT CTAGTCTATT      120
TATTCTCCTT GATGACTATT TCATACCCTT CCTCTTTCC CCAAACTTCC AACACCTCCT      180
CTTCCCATCA TTCTCAGCTG ACGGCCTTGC TTTCTCCCAT GATTGGGACT AGAGAAGCAA      240
TTTGTAGGGA ATTTCCACAA GCTCCATCAC ATGTGGCCAC TCATCTACAT CTGGATCCAT      300

```

CTATTTGGCC TTCCCTATTG TTCTTATACA CTCTCCCTGT CTTACTTTAT CTAAGGTCAA 360
CATCTCCACT CCACTTATGC ACTAGATCCT GGCATTACAC CAGCAATCCT CACCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGCTTATTCT TTTTCTTTT TCTTTTTTT TTTTTTTTC 60
GAGACAGGGT CTTTCTTGT CACCACAGGC TGCAGTGCAG TGTGTGATC ATAGCTCACT 120
GCAGCCCTCA ACTCCAGGCC TCAATGATC CTTCTGACTC AGCCTGCTGA ATGACTGACA 180
TTACACGTGC ATGCCGCTGT GCCCAGCTAA TTTTAAATT TTTGTAGAG ATGAGGTCTT 240
GCTTTGTTGC CCAGACTCGA G 261

(2) INFORMATION FOR SEQ ID NO:1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GAATTCGGCC TTCATGGCCT ACATTAACAG ATTAATCCAT CTGTATAGGG CTTTGCTGT 60
TGGATAGAAT TTAAATTGTC TACATAAATA TTTGTTTTAG GACCCTAGA TTTATCTGA 120
ATACACAGAT TAGGCTTTAA AAACAGATAT ATATGTCATT TTTGGCTTAA GGAGTTTGCC 180
TAAGTTAGCT TTTCAACTGG TTCTCGAG 208

(2) INFORMATION FOR SEQ ID NO:1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GAATTCGGCC TTCATGACTC CTGATTCAGG GGTCACTTTA CTCATAAAA AATCATTAGA 60
AAAGGAAGAA TTATGCCAAA GACTTAAAGA ACAGTTAGAT GCTCTGAAA AAGAACTGC 120
ATCTAAGCTG TCAGAAATGG ATTCTTTTAA CAATCAACTA AAGGAACTGA GAGAAACCTA 180
CAACACACAG CAGTTAGCCC TTGAACAGCT TTATAAGATC AAACGTGACA AGTTGAAGGA 240
AATTGAAAGG AAAAGATTAG AACTAATGCA GAAAAAGAAA CTAGAAGATG AGGCTGCAAG 300
GAAAGCAAAG CAAGGAAAAG AAACTTATG GAAAGAAAAT CTTAGAANGG AGGAAGAAGA 360
AAAACAAAAG CGACTCCAGG AAGCCAAGAC ACCAGNAAA ATTCCAAGAA GAGGAACGTC 420
TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

```

GAATTCGGCC TTCATGGCCT AAGACTTCTT GCAGGAAAAA TGAGTGCATT GAGGATAGTA      60
ACCTGACTTT CTGACCTGTG ATTAAATTAT GATAGTAGTC AGTCATTTTA CTCTCCAGG      120
GTTTGAGGAA GTGGCCGGTG AGGACTTGGA GCCTAGTGAG GAGTTAGTAG AGCTGCCAG      180
GGTGGAGGAG GCCACAGAGG ACAGCCCTGG TGAAGAGAAC AGTGAGGCCT TGGATGTGTT      240
GATATCCAGC AAGGACCTGG CACTGTCTAG TGAGGACGAG GCCTGCACAG GATCTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

```

GAATTCGGCC TTCATGGCCT AAGTCACTTG TGTAACGTAG TTATACTTTG CTGCATTNTA      60
ATTAACCTTC AACAGCTATT AAAGTGGAAT GTAAGTTAAA TTTTGAAGGA AAGGAAATAA      120
ATGTTTTCCA TATTTCTGCT TGATTTACTT TCTGTATGAG AACAGCTGTG TTTTGTATAG      180
GTTTATGGTT TGCATGAGTT CATATTTAAA GTGATCCAGG CCAATGCATG GCTATTGCTG      240
TAAATCTTGA TGTTTATTTT TGCCTTGTA AGTTCTATCA CGGCCTACCT GGAATTTAAA      300
ATTCAGTAGA CAAATTAATT GGTCTCTGCG ACAACTTTT TAATAAGTAG ATTATTTTAC      360
AAAGAAATTT GAACAAATTT AATTGAATCT TTTGTTTAGC TTGCCTCTAA GAACTTTTCT      420
TAATAAAGCT CCCAAACACT CGAG                                         444

```

(2) INFORMATION FOR SEQ ID NO:1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

```

GAGTGAGACT CCCTCTCAAA GGAAAAAAA AAGTTTTCTA GGATCAAAAT AGGAAAACAG      60
TTGTTTCAGA ACTCATGATA TGAGTCATGA CTACAACCCA CCATATTCAG TAAAACCTCA      120
CCTTGTCCTG TTGCTGACA TTAAGTGTTT TACGAGATCC ATACCTGTGA AATCAGCTCC      180
TCTGGAATGA CAGATGCTGG AATAACTGGC TGGGGCTGAC TGCCCAAAAG CCCAGACCTC      240
CGATCCCGTC CTGTCCGAAT AACTCGAG                                         268

```

(2) INFORMATION FOR SEQ ID NO:1085:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

```
GAATTCGGCC TTCATGGCCT ACTTTAAGTG AACAACANCA ACAAAAAAGT TAAGGGTAAG      60
ATGAGGCAGC TTTTCAGTGG AAAATACTTG TCTTGGGGAC AGTATGTCAT GTCCCTATAC      120
CTGGTGCCAT TGATAAGGTT ATTCATTCAA CAATATTTAC TGATCACTGG CATATGCCAA      180
GCACTCTGCC AAGTACTAGG GATATAAACA TTAGAAAGAC AAGTTCCTCC CTTTTCAGTC      240
ACGATCTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:1086:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 258 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

```
GAATTCGGCC TTCATGGCCT AGAGCTTCAC GGAGGCAAGA GGGTAATGGA GTGCCTAAAA      60
AAAGCTCTAA AAATAGCAAA TCAGTGCATG GACCCCTCTC TACAAGTGCA GCTTTTATA      120
GAAATTCGA ACAGATATAT CTATTTTAT GAAAAGGAAA ATGATGCGGT AACAATTCAG      180
GTTTAAACC AGCTTATCCA AAAGATTCGA GAAGACCTCC CGAATCTTGA ATCCAGTGAA      240
GAAACAGAGC AACTCGAG                                     258
```

(2) INFORMATION FOR SEQ ID NO:1087:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 391 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

```
GAATTCGGCC TTCATGGCCT AATAAAAAGA ATTATCAAAG AATTGCAGGG GAAACCCCAT      60
AGAGAAGACT CATTCTTAGA TGAGTATACA ATCCATGGGG GTCTTTAGGA TATTTAACTG      120
ATTTGGGAGA GGTCCGATAA AGAAAAAGGA GCATTAACTT TGAATATGCC TTTAGCTCCA      180
GCCGCCTCTT TAAGAGGAAA TTGTTGGGCA GGTGGGGGAA GGCTAGTCAT GGAACGAAAC      240
TGTAAGCCAG ATCGGGTGTG AGGAGGGGAG GTGATAAAAAG GATTATAGGG TGGGAGAGCA      300
CAGGCTGAGG AAGAATTGGG ACCTGGCTCA GCCTGGCAAG GCACAGCCTG GGGAGGAGGG      360
GAGAGGTCCT GTAGAAAAGG AGGATCTCGA G                                     391
```

(2) INFORMATION FOR SEQ ID NO:1088:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

```
GAATTCGGCC TTCATGGCCT AGCCTTCNAA GTTTGAATGG CCCTTAGGTT TTAAGTTATC    60
TATGCAAAGA TGAANAAGGC CTTACATTC TCAAAGGTGA CAACTCATAC CCAGCCATTT    120
GCTTATTTT GCCTGCAGAC CTCCAATGGA AGTCCGGGCA CATGGCGGAG AGCCTCACCA    180
ACATGCCACG GCACTCCCTC TACATCATCA TTGGAGCCCT CTGCGTGGCC TTCATCCTTA    240
TGCTGATCAT CCTGATCGTG GGGATTGGCC GCATCAGCCG CATTGAATAC CAGGGTCTT    300
CCAGGCCAGC CTATGAGGAG TTCTACAACT GCCGCAGCAT CGACAGCGAG TTCAGCAATG    360
CACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 409 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

```
GAATTCGGCC TTATGGCCTA GTTCATTTAA CTAATACTTG TATTAAATCA CTTCTAAATG    60
CTTATTATAC CCTGTATTAT AGTATTATAT TCTGAGTCTT AAAGGTGCTT AATGTGAAGA    120
TTCTCTCTCT ACATATTCAA CTCTTACTAA CTTTTGGCTT TAGGTAGAAA TCAGTTAGTG    180
TATTATATGA TAAAATAGGA AACTATTTCC CTAGGGGTAT AGGTATTGAG TAGGGAGCTT    240
TGGAGTCTCA ATGAGCTTCT TAAAGAAGCA TTTTAAATGG TAGGTTTTAG GGAGAGTTT    300
TGTAGTAAGA TAAAGTAGAT GAGAAAGTGT TGCCTCTAAA CAATCAACAA GCTGGGAATG    360
GGGTGCAGAA TGAGGAGAAC CCTAAGCAAT AGGCAATAAG AAGCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 359 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

```
GAATTCGGCC TTGGCCTAGT GAGAGAGCGT CAAAAAACT TCCATCTCAG CCAACCACTG    60
ATACTAGTAC TGACAAAGAA AGAACTTCAG AGGACATGGC TGATAAAGAA AAATCTACAG    120
CTGACTCTGG AGGTGAAGGA CTGGAAACAG CCCCAAAGTC TGAAGAGTTC AGCGACCTCC    180
CCTGTCCAGT CGAAGAAATT AAAAATTACA CAAAAGAGCA TAATAATTTA ATTCTGTCTAA    240
ATAAGGATGT TCAACAGGAA AGCAGTGAGC AAAAAATAA ATCAACAGAC AAAGGTGAAA    300
AGAAGCCAGA CAGCAATGAG AAAGGAGAAA GAAAGAAAGA AAAGAAGGAA AAGCTCGAG    359
```

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 280 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GAATTCGGCC	TTCATGGCCT	ACATGTTT	ACAT	TCTAAGAAAC	TTAACTCCAT	TTTTAAGCTT	60
TAAGATTCCC	CCGATCCCAA	ATAACCTAAC	ACACCAAAAG	CCTTGCCATT	TCACACATGC		120
TGTTCTTTG	CTTAGAACCT	TTTCAATGTC	TAGCTCACTC	TGTTTGGGAC	TTCTTTTTTC		180
TTTTCTTTT	TTTGAGACAG	GGTCTGGCTC	TGTCATCCAG	GCTGGAGTGC	AATGGGGCAA		240
TTTCGGCTCA	CTGCAACCTC	CGCCCTTCCA	GGCTCAAGCG				280

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 443 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GGAAAATTGA	GAAAACCATG	AAAGAAAAAG	AAGAACTGTT	AAAGTTAATT	GCCGTCTCTGG	60
AAAAAGAAAC	AGCACAACCT	CGAGAACAAG	TTGGGAGAAT	GGAAAGAGAA	CTTAACCATG	120
AGAAAGAAAG	ATGTGACCAA	CTGCAAGCAG	AACAAAAGGG	TCTTACTGAA	GTAACACAAA	180
GCTTAAAAAT	GGAAAATGAA	GAGTTTAAGA	AGAGTTTCAG	TGATGCTACA	TCCAAAGCCC	240
ATCAGCTTGA	GGAAATATAT	GTGTCAGTAA	CACATAAAGC	AATTGAAAAA	GAAACCGAAT	300
TAGACAGTTT	AAAGGACAAA	CTCAAGAAGG	CACAACATGA	AAGAGAACAA	CTTGAATGTC	360
AGTTGAAGAC	AGAGAAGGAT	GAAAAGGAAC	TTTATAAGGT	ACATTTGAAG	AATACAGAAA	420
TAGAAAATAC	CAAGCTTCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 256 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC	TTCATGGCCT	ACCTCCATTG	TATATTAACA	TTTATCATAA	TTATTATTTG	60
CTCATTCAAA	AAATATTGCT	CTGATATGGT	ATTGAATATT	CCTCACATAG	GAAAATATGA	120
ACAGTTTATT	TGCCACCCAG	ATGGTTTGGA	AGCCTATACC	CTCCAAGACA	TTGAGAAAAAG	180
AAAAATCTTT	CTCTCAGCAG	AGACAATGAG	TGCCAAGCAA	TGGGAGAAGC	CCCTTAAAAA	240
ACCATCAGAT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 454 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

```

GAATTCGGCC TTCATGGCCT AAGCTGTTAG TGATTCTGAC ACCCTTGGAC CTCCAGGAGT      60
AGCTCCTCCT GCCACGAGAG GACTCTGGCT TTTCTAATAA GGAAGGTTCT GGCCAATCAG      120
TCCAAGAAAAG GCCCGGATTC TCTTCCAAGG TGTGTCTCT GCAGAAATGT TCCTCAGGGT      180
GGAAGGTGCT GCTGCAGCAA GGGATGTCCC CTGAGTTTTC AGGTATGTAG TCTGTGGCTG      240
CAGCAGGTGA AACTCCTCA CACTCCCATT TCTTACTGTT AGATCTAAGA GAGGAGCAGT      300
CCCTGTGGGT TCCGTGGGAT CCGCATGTAG CACACAGAAT GAGGCACCAC CTCCCTTCAT      360
CCTCAAAGCT GTCTCTGCCT TGTTCATACA GACAGATGGG GGCATCACAG TGCTGATAGC      420
GCTGATATAA GTCTGAGAAA GCCCCTGGCT CGAG                                454

```

(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

```

GAATTCGGCC TTCATGGCCT AGTGATCTCA TCTCTCCGTC CATGGGCGAA AAAACAGCCA      60
TCACCAGGCC ATTCACGCTT TGTGCTTTTG TTAGCAGAGC CCAGGCAGCC CTGCAGCCCA      120
CATCTAGGGT ACAAACGGAA CGGCGGCGTT TTCCTTGAT CATTAGAGG AAATTTTGA      180
GCTGAACAGT ATTTTTTTC TCCTCTCTC TCTCTCTGAA ATATTGCTGA GATTTAAAGG      240
AGGACGAAGA CAACAGATTC ATAGCTGGGT CTTGCTGTTT TCCTGACGCT GACCACAGCG      300
GATCTAGTTT CTCTGCAGAA GACAGCAAGA TGCCCCAGGG AATGTTGTG AAAAAGGATG      360
ACTGGATGGG AAGCAAGCTG AAGAAAAAGA AGGAAAGAAA GAGAGAAATC AGTAAATCAC      420
CACACAAGAG GTGGAGAAGA GGACTCGAG                                449

```

(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

```

GACTGGCCGC AAGGGACGGG TTGTAGCAA TGATGATGGA AGCATATCTT ATGAGTCAAG      60
ATCTGAACTT GATGTGCCTG TGGAAATACT AAACATCACA GAAAAACAAC GATTATGGA      120
TGGAGATAAG AATATTGCTA TCATCTCAGA AGCTGCCATG CTCGAG                                166

```

(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

GAATTCGGCC	TTCATGGCCT	ACATTATTTA	CACCTGTCCC	AGACTTTGAT	TCAGGAACTA	60
ATGCTGCAAA	GCAAGGACTA	TGATGGAAAA	TGCTCACTGC	AAGAATGGTA	GCTGCAGCAA	120
GATCAAGATC	CCAGAAAGCA	GTGGCCAAGG	CACTCACTGT	AGACTTTAGT	GCCTGCAGCA	180
TCTGGTGCAA	GCTACACTGT	CTACGCCCAG	GAACACAGCA	GCAGCATCCG	GCCTGGGCCA	240
ATTCTGTGTA	AGATTTGATG	CGCTGTCCCT	GGCTGCAUTG	CCTGCAGACA	TCTCTCTCTA	300
GCCCTTCTAA	CAATTTTACA	GCAACTCAAC	ATCTTTAAAA	ATTTATTAGC	CAACCAAAAT	360
CAGCTTCTGT	GGCATGCAAG	TAAAAACCCA	GGCTGATATG	TCTGAATACA	GAAGATTTAT	420
ATTAGTTTCT	TAGAGTCAAT	AATCCATACA	GACTCTATTC	TAGCTTCTTT	GTGAAGTGGG	480
TAAGAATTCC	TCTGCCTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:1098:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

GAATTCGGCC	TTCATGGCCT	ACTTCAAAAA	CATATATTAA	TATTTTGTGA	CCACGTAAGT	60
TCATCAGAAG	CCTGACTTTA	ATCTCTGATT	TATTATATTT	GAACACTGTG	AAGAAGCAGT	120
TTAACACTGA	ACGAAAGTGT	CGTAATGCAG	CTTTCAAAGT	GGCCATTAAA	GACAGATCTC	180
TGCTTTTCTA	TTAGTACATT	TTCTAAGATG	ACTATCATTG	CCATTGTAGT	CAGCTTTGTG	240
TACCTTTATA	GAGATTCCAG	TATAAACCCA	GAAACGCTCG	AG		282

(2) INFORMATION FOR SEQ ID NO:1099:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

GAATTCGGCC	TTCATGGCCT	AGGAACTTT	TCAAAGAAGT	AGTCCACGAG	AACTACCTTG	60
AAAGAGCAAA	ACCAGCCAGG	TGCAGTGGCT	CACGCCCATA	ATCCCAGCAC	TCTGGGAGGC	120
CCAGGTGGGT	GGATCTCGTG	AGGTCAGGAG	TTCAAGACCA	GCTTGGCCAA	CATGGTGAAA	180
CCCCATCTCT	GCTGAAAATA	CAAAAGTTAG	CTGAAAATAC	AAAAGTGGCA	CATGCCTGTA	240
ATGCCAGCTA	CCGGGAAAGG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:1100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

CTCGAGCGTA	TCCCAGAACT	TAAAGTATAA	TAATAATAAT	AATAATAATA	ATAATAATAA	60
TAATAAAACC	TTCCAACAAG	CTTCCTTTCC	ACCACAGGAA	ATCCTGTTGG	GAGTTCCCCC	120
TGAACCAAAA	AAAAAAAAG	ATAGAGTATA	AAACATACAC	TTTCAGGAA	TGCTTATTGG	180
GTAATGTAAG	ATAACACCTC	AAAATGAAAC	TCAGAATTTT	ATTTTATTTT	ATTTTTTGAG	240
ATGGAGTCTC	ACCTAGGCTG	GAGTTCAGTG	TGGTAATCTT	GGCTCACTGT	AGGCCATGAA	300
GGCCGAATTC						310

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTGT	ACCTCATTCT	CCATCTCTG	ATATTATGTC	60
ATCTGATCAA	GAAACTTACT	CTTGTAACCC	TCATGGACGG	ACTCCACTTA	CCTCAGCTGA	120
TGAGCATGTA	CATTCCAAAC	TGGAAGGAAG	TAAAGTAACG	AAATCTAAGA	CTTCTCCGGT	180
GGTATCTGGT	TCATCTAGTA	AATCAACCAC	CCTTCCAAGG	CCACGACCTA	CCAGGACTTC	240
CCTCTGCGC	AGAGCAGCAC	TTGGTGAAGC	TTCAGACAGT	GAACCTGCTG	ATGCTGACAA	300
AGCATCTGTT	GCTTCTGAAG	TATCCACAAC	AAGTTCTACA	TCAAAACCTC	CCACAGGAAG	360
GCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

GAATTCGGCC	TTCAATGGCCT	AAGAAAGCAA	GAAAGCACGA	AAGCAATCAA	GCAAGAAAGC	60
AAGCAGGAAA	GAAACAAAAG	AAAGAAAGAA	NGCGAGAAAA	CAAGAAAGCA	CGAAAGCAAG	120
CAAGCAAGAA	AGCAAGCAAG	AAAGAAACAA	AAGAAAGAAA	GAAAGAAAGN	AAACAGGAAA	180
GCAAGAAAGC	ACGAAAGCAA	GCNAGCAAGC	AAGAAAGCAA	GCAAGAAAGA	AACAAAAGAA	240
AGAAAGAAAG	AAAGAAAGAA	AAAGAAAACA	GGAAAGCAAG	AAAGCACGAA	AGCAAGCAAG	300
CAAGCAAGAA	AGCAAGCATG	AAAGAAACGA	AAGAAAGAAA	GAAAGCAAGA	AAACGGGAAA	360
GACTCGAG						368

(2) INFORMATION FOR SEQ ID NO:1103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

```

GAATTCGGCC TTCTGGCCTA GAAACCCGTG ACACACACAC ACACACCTGC ATAGATTTTT      60
CCCAAGCACA CGATATGCAC GTGGATACAC AGACTTACAA GCACAGGGCC ACGTGCAGAC      120
AGACACAGAC CCTGTCTGCA CCACAAACAT ACCACACACA GCCACACACA CAGAAGCCAA      180
ACATCCTCGC ATAGGTGGAT ACAAGCACAG ACTCACATAC ACATATGCGA TACACATATG      240
GATACATACA CAGAGTACCC CCACAAACAC ACAGACACAC ACGGGCAGAG ACAGACAGAG      300
ACAGGCACAG ACCCCCCCCC ACCTCGAG                                     328

```

(2) INFORMATION FOR SEQ ID NO:1104:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

```

GAAAAAACT GAGTTAATGG CCATGACTAG ATGGGAGGTC AGATTCGCCG TTATATCCTC      60
TCTGTTTTGC AGTTTAGACA CAACTGACCA GCATTGTTAA AATGGAGATC ATACGGCTGG      120
TAGAACAGAC TCTTTGTGGC CCAAAATTAG CAAATTATAA ATAGAATCTA AAGCCATCCC      180
AGGCAAGGGT TAAGTTATGC ACCCCTACAC TTAAAGAATA AACTATGTTG GCCGGGCCAA      240
CTCGAG                                     246

```

(2) INFORMATION FOR SEQ ID NO:1105:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

```

GAATTCGGCC TTCATGGCCT ACGATCAGAA AGAAAACACA GATCTCGAAG TCGGGATCGA      60
AGAAGATCAA AAAGCCGGGA TCGAAAGTCA TATAAGCACA GGAGCAAAAG TCGGGACAGA      120
GAACAAGATA GAAAATCCAA GGAGAAAGAA AAGAGGGGAT CTGATGATAA AAAAAGTAGA      180
GAAAGAAGGC GGAGCAGAAG TAGAGATCGA CGAAGAAGCA GAAGCCATGA TCGATCAGAA      240
AGAAAACACA GATCTCGAAG TCGGGATCGA AGAAGATCAA AAAGCCGGGA AGCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1106:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 211 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

GAATTCGGCC AAAGAGGCCT AGGGATGGAT GGTTCAGCTG CTAGAATTTC GATGCAGGAC      60
TTCTTCAAAA TTGAGTGGAT GATGCCTTGC AGAGCCTGAA AGCCGTCATT CACGGGAAAC      120
ACATGATCCT TACTGTCCGC AATCCGGGCC AGCTGTGTCT CATTGAAATC TTTCACACCA      180
ACACAGTAAA CAATTGCACC AAGATCTCGA G                                     211

```

(2) INFORMATION FOR SEQ ID NO:1107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

```
GAATTCGGCC AAAGAGGCCT ACCTGCTTGA ATTGGGGCCC CTTGTGAAGC TGCTGCCGCA      60
TCTCTTCCAT TCGTGCTTC CGGTACTGCT GCAGAACTC TTCATCATCT TGGTCCTCAT      120
TCATTATGGC AAACTCCTTC AGAGTCATCT TCCCCTGAT CTTCTCCTGG AGGTCTTTCT      180
GTTTCTGTTG CTCCTCCTCT TCATCCAGAT GGGACCTGCA AGTCATTGAC AGCTTCTTGA      240
TCAGCCTTTC CATCTCCCGG CAACTCGAG                                     269
```

(2) INFORMATION FOR SEQ ID NO:1108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

```
GAATTCGGCC AAAGAGGCCT ATGAAAATTG ACTGCAATTA GTAAAGTTGG TATAACGTAC      60
GTCCCCAGTT GTGCTATTTA GAATTATGAT AGTATTATGC TCCTACTTTT CTTTGATATT      120
GAGTAGTCTC GAG                                     133
```

(2) INFORMATION FOR SEQ ID NO:1109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

```
GAATTCGGCC AAAGAGGCCT AGCTTTTCT AATCATAAAT TATATGACCT TTACAGAAAA      60
TTAGAAAAT ACAGAAAAAC TGAAAAGTTA CACATGGTAC AACTCACAAC CACAATCCTC      120
GAG                                     123
```

(2) INFORMATION FOR SEQ ID NO:1110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

GAATTCGGCC	AAAGAGGCCT	AGTGTTCAG	ATCCTACGGC	TTATGAGGAT	TTTCCGAATT	60
CTAAAGCTTG	CCCGGCACTC	GGTAGGACTT	CGGTCTCTAG	GTGCCACACT	GAGACACAGC	120
TACCATGAAG	TTGGGCTTCT	GCTTCTCTTC	CTCTCTGTGG	GCATTTCCAT	TTTCTCTGTG	180
CTTATCTACT	CCGTGGAGAA	AGATGACCAC	ACATCCAGCC	TCACCAGCAT	CCCCCTCGAG	240

(2) INFORMATION FOR SEQ ID NO:1111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

GAATTCGGCC	AAAGAGGCCT	AGGTGGGGAG	GGGAGGGGAC	AGGAGAAATG	AAATACCTTC	60
ACCGAGAACT	CAGCAGCTGC	CACCGCAGCT	GCCTCCTCAG	GATCCGGTCG	TCGGGGATAG	120
GGAAGGGAGG	GGAAGGGGA	ACGGAAAACA	AAAAAAGGG	GGAGGGAAGG	GGGAGGAAGG	180
AGTCGGGGAC	GGCCTCAAAC	TCAGCTCAGA	GGAGTCGCTG	CTGCAGCCGC	CACTCGGTAC	240
CCGCTGCTAG	GCCTCTTGC	CGAG				264

(2) INFORMATION FOR SEQ ID NO:1112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

GAATTCGGCC	AAAGAGGCCT	AAATATTAGA	AAATGTATAT	TATAGAACAT	GATATATATT	60
TACATTCATC	TCTGTATTCT	CTCAGCTGTT	GTTAGAAGGA	CAGAATGTTA	AACTTTATCT	120
TAATTAGTAT	ACTAGAAAGG	GCAGTATAAT	ACTGTTTTAA	AGTGAAGGCA	TGACTGAAAC	180
TAAAATATTT	CATAAGGCTT	AGCTAGAGGC	AGAGTAACGT	GTTTTTGTTT	ATTGGGCTTC	240
CTTGTACTTA	GTTTTTTCAT	TTAATAATTC	AAACCAACAC	TTTTAAAAAA	ATAATTCAGA	300
TGAGACTGAG	CCATATCTGC	AGTAAGAGAA	ATATTTCTTA	ATGTTTGGT	TACTTATGAT	360
AGAGTACTTT	TCTTGATACT	GTTAACTTTG	TGCTTTTTTA	AAAAAGTGAT	TCTCTAACAG	420
ACCTCTTAAA	TTGTGACATG	AAGGTATGTA	ATTAGATTTC	AGAAATTGGT	TTATTAGTGA	480
GGAATTTTAA	TCAATAAATG	TCATGGGGCG	GCGCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

GGCCACCTA	GTTGGTATCC	CAAATTCACA	CATTCAAAAG	CAAAGCCATT	TCTCACCTTC	60
CTCCAAAATA	CTTGTAATTC	CTAATATCCT	GACTCCAATC	CATTCTTTAT	TTCTATTCC	120
CAAGGCCCTT	CACAGAATCG	AAACTTTTGT	TATGAGCTCT	TACATGGTGT	ATCATCAATA	180
TGTTCACTAG	ACAGGAGTTT	TTTTTAAAAA	AAATCCTCAT	CATTCTCTT	CAATTCAAGA	240
GCTCTGATGG	CTTCCAGTCT	ATACAAGATA	TATTAAGGCT	CAACTTACAG	TTCCAGTCTC	300
ACCTGCCCCA	CCTCCACCTT	CCCAAACCCT	CTGTATTCTA	GCCAGAGCAT	ACCTGCATTC	360
CCTTAGCTCA	ACATGTGTCC	TTGCTCACAC	TGTCCCTTTG	GTTGACCTAG	CTTCAATTCC	420
TTCTCATGT	GCAGTTATGT	GTCTACTAAG	CAGCAATGTG	AAATGTCTTT	ATTGTAGGTC	480
TGTCAAAAGC	TAAAGTCATG	GCCCGGTGCA	GTGGCTTGGG	CCTGTAATCC	CAGCACTTTG	540
GTAGGCCCTCT	TTGGCCGAAT	TC				562

(2) INFORMATION FOR SEQ ID NO:1114:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

GAATTCGGCC	AAAGAGGCCT	ATTATTGCTA	TCGCCCTCCT	TTCCCTTATT	GCCTCCCAGG	60
CAAGCAGCTG	GTCAGTCTTT	GCTCAGTGTC	CAGCTTCCAA	AGCCTAGACA	ACCTTTCTGT	120
AGCCTAAAC	GAATGGTCTT	TGCTCCAGAT	AACTCTCTTT	CCTTGAGCTG	TTGTGAGCTT	180
TGAAGTAGGT	GCCTTGAGCT	AGAGATAAAA	CAGAATCTTC	TGGGTAGTCC	CCTGTTGATT	240
ATCTTCAGCC	CAGGCTTTTG	CTAGATGGAA	TGGAAAAGCA	ACTTCATTG	ACACAAAGCT	300
TCTAAAGCAG	GTAAATTGTC	GGGGGAGAGA	GTTAGCATGT	ATGAATGTAA	GGATGAGGGA	360
AGCGAAGCAA	GAGGAACCTC	TCGCCATGAT	CAGACATACA	GCTGCCTACC	TAATGAGGAC	420
TTCAAGCCCC	CTCAG					435

(2) INFORMATION FOR SEQ ID NO:1115:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 477 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

GAATTCGGCC	AAAGAGGCCT	AGTGCCTAGA	TTGATCGGTA	TAAGGCTCAC	TCTCCGCCCC	60
CCCAAAGTGG	TTGATCGTTG	GAACGAGAAA	AGGGCCATGT	TCGGAGTGTA	TGACAACATC	120
GGGATCCTGG	GAACTTTGA	AAAGCACCCC	AAAGAACTGA	TCAGGGGGCC	CATATGGCTT	180
CGAGGTTGGA	AAGGGAATGA	ATTGCAACGT	TGTATCCGAA	AGAGGAAAAT	GGTTGGAAGT	240
AGAATGTTCG	CTGATGACCT	GCACAACCTT	AATAAACGCA	TCCGCTATCT	CTACAAACAC	300
TTTAACCGAC	ATGGGAAGTT	TCGATAGAAG	AGAAAGCTGA	GAACTTCGGA	AAAGGCTCAT	360
CTGTCACCCCT	GGAGAAGGGA	AACTGTACTT	TTCCCTGTGA	GGAAACGGCT	TTGTATTTTC	420
TCTGTAATAA	AATGGGGCTT	CTTTGGAATT	TGATAAGCCT	AGGCCTCTTT	GGCCGAA	477

(2) INFORMATION FOR SEQ ID NO:1116:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 620 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

```

GAATTCGGCC AAAGAGGCCT AAGATGAAGC CCAACATCAT CTTTGTACTT TCCCTGCTCC      60
TCATCTTGGA GAAGCAAGCA GCTGTGATGG GACAAAAAGG TGGATCAAAA GGCCGATTAC      120
CAAGTGAATT TTCCCAATT CCACACGGAC AAAAGGGCCA GCACTATTCT GGACAAAAG      180
GCAAGCAACA AACTGAATCC AAAGGCAGTT TTTCTATTCA ATACACATAT CATGTAGATG      240
CCAATGATCA TGACCACTCC CGAAAAAGTC AGCAATATGA TTTGAATGCC CTACATAAGA      300
CGACAAAATC ACAACGACAT CTAGGTGGAA GTCAACAACCT GCTCCATAAT AAACAAGAAG      360
GCAGAGACCA TGATAAATCA AAAGGTCATT TTCACAGGGT AGTTATACAC CATAAAGGAG      420
GCAAAGCTCA TCGTGGGACA CAAAATCCTT CTCAAGATCA GGGGAATAGC CCATCTGGAA      480
AGGGAATATC CAGTCAATAT TCAAACACAG AAGAAAGGCT GTGGGTTTAT GGAATAAGTA      540
AAGAACAAAC TTCCGTCTCT GGTGCACAAA AAGGTAGAAA ACAAGGCGGA TCCCAAAGCA      600
GTTATGTTCT CCAAAGTAA

```

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

```

GAATTCGGCC AAAGAGGCCT AGACCTGCCA CATTGTGTTAA CATTITTCCA TTTCTAAACC      60
ATCCTTAAAG AAAATCATAT ATGGGGTCAC ACCATCCTCA CGGTAGTCCA ATAGAGCAAC      120
CATGCCATCT GGATTCATGT TTTACCAAAA CCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

```

GCACTGCTTC TGTTAAAGTC ACTGACCTTA ACAGTTTAGA ACTAGATAAA GGAAATTTTG      60
TGGTTGACCA AATGTGTGAA ATAGGTAAGC CAGAACCATT GAATGAGGAG GAAGCAAGGG      120
GTGTGGTTGA GAATTATAAT GATGAAGAAG TGTCAATTAG AGTTGGTGGA AATACACAGC      180
CAAGTAAAGT TTTGAACAAA AAAAATGTAG AAGCTATTGG ACTTCTTGGA GGACAAAAGA      240
GCAAAGCAGA TTATGAGCTA TACAACAAAG CCTCTAATCC TGATAAGGTT GCTAGTACAG      300
CGTTTGCTGA AAATAGAAAT TCTGAGACTA GTGATACTAC TGGGACCCAT GAATCTGATA      360
GAAACAAGGA ATCCAGTGAC CAAACAGGCA TTAATATTAG TGGACTCGAG      410

```

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

```

GAATTCGGCC TTCATGGCCT AGTTGCCCTA ATTTGCAGCC GAACTTGGAA GCCACTGTAT      60
CCAATGGACC TTTTCTGCAG CTTTCTTCCC AGTCTCTTAG CCATAATGTT TTTATGTCCA      120
CCAGTCCTGC ACTTCATGGG TTATCATGTA CAGCAGCAAC TCCGAAGATA GCAAAATTGA      180
ATAGAAAACG ATCCAGATCA GAGAGTGACA GTGAGAAAAGT TCAGCCACTT CCAATTTCTA      240
CCATTATCCG AGGCCCAACA CTGGGGGCAT CTGCTCCTGT GACAGTGAAA CGGGAGAGCA      300
AAATTTCTCT TCAACCTATA GCAACTGTTC CCAATGGAGG CACAACACCT AAAATCAGCA      360
AAACTGTACT TTTATCTACT AAAAGCATGA AAAAGAGTCA TGAACATGGA TCCAAGAAAT      420
CTCACTCTAA AACCAAGCCA GGTATCTCG AG                                         452

```

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

```

GAATTCGGCC TTCATGGCCT ACATGAATCT ACTTCTGATC CTTACCTTTG TTGCAGCTGC      60
TGTTGCTGCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACATCT GTGAGGAGAA      120
TTCTGTCCCC TACCAGGTGT CTTTGAATTC TGGCTACCAC TTCTGCGGTG GCTCCCTCAT      180
CAGCGAACAG TGGGTGGTGT CAGCAGGTCA CTGCTACAAG TCCCGCATCC AGGTGAGACT      240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAACAG TTCATCAATG CAGCCAAGAT      300
CATCCGCCAC CCCAAATACA ACAGCCGGAC TCTGGACAAT GACATCCTGC TGATCAAGCT      360
CTCCTCACCT GCCGTCATCA ATTCCCGCGT GTCCGCCATC TCTCTGCCCC CTGCCCCTCC      420
AGCTGCTGGC ACCGAGTCCC TCATCTCCGG CTGGGGCAAC ACTCTGAGTT CTGGTGCCGA      480
CTACCAGAC GAGCTGCAGT GCCTGGATGC TCCTGTGCTG AGCCAGGCTG AGTGTGAAGC      540
CTCCTACCCT GGAAAGATTA CCAACAACAT GTTCTGTGTG GGCTTCTCG AG                                         592

```

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

```

GAATTCGGCT TCATGGCCTA AATAATTTT ATTGAGAATA ATAAATCACT CTTTATCATA      60
GTATCTTCTC TTCCCTCTTC CCCTTTAGTT TGGATAGCCT AACTCTGAGA AGTTAACCCT      120
TAAACAGTTT TCTGGAAGAG ACTGAATTTC TGGGTCCTTG CAGCTGTGAT GGTTTCAGAG      180
CTCAGACTGA TCAGGCATCA AGCTACCTC AAGAGTTTCT GGGCTGGATG TTTCAGAACA      240
ACATCTACAC CAGTAAAGTG TAATAGGTCA GTTTCAAAAC GACCAAAAGA CCCCACCACT      300
CGAG                                         304

```

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

GAATTCGGCC	TTCATGGCCT	AGTGAACTC	CATTTTTTTA	CTGCTATTAC	TCTGTGTTTT	60
CAGTTTTATG	ATTTGGAATA	CCATGATGGG	AACATCTATA	CTAAGCATTC	CTTGGGGCAT	120
AAAACAGGCT	GGATTTACTA	CTGGAATGTG	TGTCATCATA	CTGATGGGCC	TTTAAACACT	180
TTATTGCTGC	TACAGAGTAG	TGAAATCACG	GACTATGATG	TTTTCGTTGG	ATACCACTAG	240
CTGGGAATAT	CCAGATGTCT	GCAGACATTA	TTTCGGCTCC	TTTGGGCAGT	GGTCGAGTCT	300
CCTTTTCTCC	TTGGTGTCTC	TCATTGGAGC	AATGATAGTT	TATTGGGTGC	TTATGTCAAA	360
TTTTCTTTTT	AATACTGGTA	ACCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 478 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

AGCAATTCCA	TAAACACATC	CTGGTGTCTAT	CACAGCCAAG	GTTTTTAGGT	TGCTATACCA	60
ATGGCTTATT	AAATGAAAAT	GGCACTAAAA	GTTTCTTGAG	ATTCTTTATA	CTCTCTGCCT	120
TCAGCAATCA	ATTCCATTCA	TACATCAGCA	CTCTGCTGGT	TCTGTTTGAA	ATATGTTCTG	180
TATTTAAAAC	TCAAATCTTG	TTGGATCTCT	GCAGGGCTTG	TGACCAATGA	AGTCATATTT	240
GTTGATGGTT	GACAAAGCTT	GCTTCACTCC	ATCAGAGAAT	GACTATCAAT	TTTTTTTTAA	300
CTGTCTTATC	ACGTCCTCTC	CTGTCACCCA	TTTTGAAGAG	TGGCAGAACT	TGAAGTTCAA	360
CTTCCTCTGT	AAATATCCAA	GTATAAAGCC	CAGGAACTTC	TAGAATAACC	CAGATGCGCT	420
TTAATTTTTT	TTAATATGTT	TTGATCACAG	AACTCCTTAG	GCCTCTTTGG	CCGAATTC	478

(2) INFORMATION FOR SEQ ID NO:1124:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

GAATTCGGCC	AAAGAGGCCT	AGGAATTCAG	TGCAAACT	ACTTTGAACT	GTGGTTCCTA	60
ATTTCCACGA	AAGTTTTTCT	CTGTTCTTCT	ATTATGGCAC	TTTTCAGGGT	CTCCCTTGTA	120
CATTTTAGTT	TTTGTGTTTT	TCAGTAAGTG	CCTTGAGATC	AGGGACCGGT	TCTACTGGTC	180
TGTTCCAACC	ATAGTTCCTT	AAACATTGTG	TTCCATTAAT	ATTGGGTGAA	TTGAAATGAA	240
TTTATAGGAA	GCTCCTTAAC	CTGGGGTCCT	CAGACCTCTA	TGGGGTCCAT	GGACAGAAAT	300
TGAAGTGGGA	AGGATATATG	AACTTGGATG	GAGGAAAATT	ACTTATTTGT	TTTTTACCAA	360
CCTCTCCTTT	GTAATTTAGC	CATTTGTTCA	ATTATAATGT	AGGCAAATAA	AAATAAAAAT	420
AAAAATAAAA	TAAAGGCAGC	TTAGGCCTCT				450

(2) INFORMATION FOR SEQ ID NO:1125:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 550 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

```
GAATTCGGCC AAAGAGGCCT ATCCTTAGTG GATTCCGACT TCCATGGCCA CCGTCCTGCT      60
GTCTATATCA ACCAACACCT TTTCTGGGGT CTGATGAGCG TCGGCATCGG GCGCCTTAAC      120
CCGGCGTTTCG GTTCATCCCG CAGCGCCAGT TCTGCTTACC AAAAGTGGCC CACTAGGCAC      180
TCGCATTCCA CGCCCGGCTC CACGCCAGCG AGCCGGGCTT CTTACCCATT TAAAGTTTGA      240
GAATAGGTTG AGATCGTTTC GGCCCAAGA CCTCTAATCA TTCGCTTAC CGGATAAAAC      300
TGCGTGGCGG GGGTGCGTCG GGTCTGCGAG AGCGCCAGCT ATCCTGAGGG AACTTCGGA      360
GGGAACCAGC TACTAGATGG TTCGATTAGT CTTTCGCCCC TATACCCAGG TCGGACGACC      420
GATTTGCAAG TCAGGACCGC TACGGACCTC CACCAGAGTT TCCTCTGGCT TCGCCCTGCC      480
CAGGCATAGT TCACCATCTT TCGGGTCCTA ACACGTGCGC TCGTGCTCCA CCTCCCGGC      540
CGGCGGGCG
```

(2) INFORMATION FOR SEQ ID NO:1126:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 381 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```
GAATTCGGCC AAAGAGGCCT AGTTTGCAAG AAGAAGGCAT GGGATAGTCT GAGAACAAAC      60
AGGCACTAAA TGGAGCAACA TCATCTTGAG GTGTCAAGCA GGAGCTGGGA GACCAGCAGA      120
GACTCCCAAG GCCTTGCTGC TGTGGTCTG CAGGCAGCTC TGTAGGCGAG GCTGTTGTCA      180
TTTTCGAAGT GAGCAAGCAG AAGCCAGGC AGGTGAGTCA TTCACTCCAC AGTTCATAAC      240
TTGGATTGTG GGTAGTTAC ACCTGACTCC AAAACTTGAC TTTTACTAC TCAGCTATAC      300
TGGCCTCTCA AGAAAGGCTA GGCCCTAATT TCTAGACTCT CTTTACCAA TAATACCTGT      360
TGCCACGAAG TAGGCCTCT T
```

(2) INFORMATION FOR SEQ ID NO:1127:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```
GAATTCGGCC AAAGAGGCCT ACTCTCAAGG TGGGCATATG CAAAACATAA TCTCTAAATT      60
CTTCAATACT AAGAAATACC TTTGTTTAC CCCTAAAATC AAATGCCATT TTGGCTGGAT      120
ATAGGATTCT AGGATTAAAG CCTTTTCCA GCAGAACTTT GAAGACATTG CTCCATTAC      180
TTCTAGCATC CAGTGTGTCC AGTGATAAGT CTGCTGTCAA CCTGATTCTT GTTCCTTGGT      240
AGGTAATTC TCTTCTCTCT CTAGAAGCCC TTATTATTTT CTCTTTATCA CTAGAATTCC      300
AAAATTTCAC CAAGATGTGT CTAGGAGTCA GTCTCTTTTC ATCAATTTTA CTAGGTACTC      360
```

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361

(2) INFORMATION FOR SEQ ID NO:1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GCAGCCAATG GCGGCGCCAG AGGGGAAACN GAGCCTTGCT NACGGGCCCA ACCTGGGGA      60
GCAGCCAGGC CAGGTGGCGG GCGCAGACTT CGAGAGCGAG GACGAGGGCG AGGAATTGA      120
TGACTGGGAG GACGACTACG ACTATCCCGA AGAGGAGCAG CTCAGTGGTG CCGGCTACAG      180
AGTATCAGCC GCTCTGAAG AAGCCGACAA GATGTTTCTG AGAACAAGAG AACCAGCCCT      240
GGATGGCGGG TTTCAGATGC ATTATGAGAA GACCCCGTTT GATCAGTTAG CTTTATCGA      300
AGAGCTTTT TCACTGATGG TTGTCAATCG TCTGACCGAA GAACCCGGCT GCTCTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:1129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

```

GATGGCACCC TCCTCAGAAA GCAGCGTCCC CTCTCACAGT ATGTCCTCCC GACGGGACAC      60
AGACTCGGAT ACCCAGGATG CCAATGACTC AAGCTGTAAG TCATCTGAGA GGAGCCTCCC      120
GGACTGTACC CCTCACCCA ACTCCATCAG CATCGATGCC GGTCCCCGGC AGGCCCCCAA      180
GATTGCCCAG ATCAAGCGCA ACCTCTCCTA TGGAGACAAC AGCGACCTG CCCTAGAGGC      240
GTCTCTGCTG CCCCACCCG ACCCTGGCT CGAG                                274

```

(2) INFORMATION FOR SEQ ID NO:1130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

```

GGCTTTCCAC CTTCCCTGCG GAGATGAGGG TGGTGGCCTC CCTTTTGTG ACCCTTCCAA      60
GGGTCATGCT CGTCTGCTGG CTTTCTCCA AGATGCTGCC AAAAAATGATC TTAA1AAGAC      120
ACAAGCCTGG TTGTGATATT TTCCTGATTC AAGTGTCTCT GTGGTTCTTG GTTGCCCTTCA      180
GGAGAGAGTT CAAGCCTCTT ATGGTGGTTT GTGAGGCCAG GCCTGAACTA GCCCCATCGT      240
CTGTTTATT ACCACCCAG TATCCCTGCT GCAGGTTTTT AAAGATCTCA TGTCCTGAT      300
TGCTGTCTAC TGTGTCTGAC TCGAG                                325

```

(2) INFORMATION FOR SEQ ID NO:1131:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 639 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```
CTCGAGGATC CCCGGGGACG GGACGGGCCG GGGCTTGGAG GGGGGTCGGC TGCCACAGGC      60
TCACATCACG GCCTCCATAT GCAGGATCCT CAGGGCCTCG GAGATCTGCG CGCTGGGGTC      120
CATCTGGCCG TACATGCCCA CCAGGAAGGC CCGGTGGAGC AGCACAGCCG CGTGCTCTTG      180
GCACAGGAGA GCGTACTCAG GCAGGTTCCG GAGGGCCGTC TGCACCACCT CAAAGTCCTG      240
GCTGCCCAGG CAGTACATGA ACGTNGGGCA GGAAAGCGGC TGCAATGCNG GGGGCTGTCT      300
GCATGGAGCG CAGGGCCAGG CTGAAGGCGA GGTTCGGGCA ACACTCCTCG GCCGAGCTCA      360
TCAGCCGCTG CAGGTTGGTC GAGAAGAAGC TCAGGATCTC GGGTCTCCGC CGGGACATCT      420
CGTCTATGTC ACTCAGAACC TCCAGCAGAT CCTCCACCGT TTGGCCCCGG GAAAGCCGTT      480
TCATGTAGGG GGCCATCTCG GCCGCGGTCA GAGGGGTGAA CAGGGAGACG CTGACCAGGG      540
GCAAGGAGCC GGCTGAGCTC TCCTCCTCGC CCTCTTCGTC CAGGCCTCGG TCGGTCTCTG      600
CGTCCCTGCT GGGCAGGCTG AGCCCTGCAA GGAGGGATC      639
```

(2) INFORMATION FOR SEQ ID NO:1132:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 448 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

```
GGTCTGTGGT CTTGGAGGCT TAAATTGTAA AATACATCCC TTATGGAATC CTAAATTCCT      60
CTAGGTGTTT TTGGAAGGCG CATTTGAGCC TTGTGAGCTA AAATGGAATG GATTTAATAT      120
TTCCTATCTG GCATTTCCAT CTTGCCCCCTG GTACACAAGT CACTGGCCTG GAACTCAGCC      180
TTGATTCACT GTCCGTCTTC ACGGATTAGC TGTGCTGTTA TGTGTCTGT GCTGCAGATT      240
GGCCCATGTG GGAAGTCGGG GGGGACCTGA TTTCTGCTT GGAAGACTTG GGGGACTGCC      300
GAGCATATCA AAGTGTTTAT AGTCACCAAG TGAAGTGCAG CACAACCATC TCCTCTCCAG      360
CAAGCCCTGA AGTCAGTAGT GCCTGCAGGT GAAACCAACC AGCCCTGTGT TAGAGGAGGA      420
AAAGCGGAGA TGACGTGGAA GTCTCGAG      448
```

(2) INFORMATION FOR SEQ ID NO:1133:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

```
GAATTCGGCC TTCATGGCCT AGGGCTATGG CCGGAGCTTG AGATACGCCG CTCTGAATCT      60
TGCCGCCCTG CACTGCCGCT TCGGTCACTA TCAACAGGCA GAGCTCGCCC TGCAGGAGGC      120
AATTAGGATT GCCCAGGAGT CCAACGATCA CGTGTGTCTC CAGCACTGTT TGAGCTGGCT      180
TTATGTGCTG GGGCAGAAGA GATCCGATAG CTATGTTCTG CTGGAGCATT CTGTGAAGAA      240
```

GGCAGTACAT TTTGGGTTAC CGAGAGCTTT TGCTGGGAAG ACGGCAAACA AGCTGATGGA	300
TGCCCTAAAG GACTCCGACC TCCTGCACTG GAAACACAGC CTGTCAGAGC TCATCGATAT	360
CAACATCTCG AG	372

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

GAATTCGGCC TTCATGGCCT AGCTGGTTCT TTTATTTTGG TGTCTCAGGG ATGTAAAAGA	60
TTTTTAGTGC ATAATATTAA ATGGCAAAT CAAATTTCCC AACAATATAC AAAATAAAAT	120
CCCATTTACA AAGCGAAAAG GCTTTATCTA TTTGTATATC TTCTTATATG TATATAAAAT	180
CATAGAAAAC TATCTGGAAG TGTATGTAGC AAAGCATTAA CAATGGTTAT CTCTGGGTAT	240
AAGAAGGAAC TAGACTGAA GAAGATGGTG GTGATAAGGG AAGGTATACC TTTCTTTTTT	300
TTTTATTCTG CTGTGCTTGA GTTTTAAAGA ATGAGAATAT TCATGTATT CTTGTATAAT	360
TATAACACAG AAAACCTCCT TATTAGGAAT AGGAGGCTGA TTTCTTTTTT AATGACTGAT	420
CTTAGTCCT TTTTGGGTAT TTCTCCCTCG AG	452

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

GAATTCGGCC TTCATGGCCT AGGAGGAGGG AAGGATTGGG AGCAGTGGGG TGTGAGTGGG	60
AGAGGAGGTA GGAACACAGA TGGGAGAGAT CGAGCCAAGT TCTGGGTGG AGGAACTTT	120
CTTATTTAAC TGAGCTGGTG GGTACATAT CTAATGTTGC AGGTGATGAA TACAGGCTGG	180
GGTAGCCGTC TAAATCCACC GAAAGAAAGTA AATGAAAGTG GTTTCTTGTA GGTGAAAGG	240
TCAAGGTAA TGGCTGGTTT TTAGGAAACA ACTGATCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

GAATTCGGCC TTCATGGCCT ACTGGAGACT TGTAATTAGT CTAAGCATAA TATGATTAGG	60
TGGATGAAAT ATTTTGGAGT TTGGTTTGT TTTAAATGTA AATACTCATG AAAAGTAAAA	120
CATACTGCAC TGTGTCCCTG GGAATATTTT TGTATCTTT AAAATACTCA GTATTATAGG	180
CATTTATTAA CACAGCCTTA CATTGCCCCG GTTTGACCTG GAGGCCGAAA TGAATTGTGA	240

CTTATGTCCC AGCTGGGTCT CGAG

264

(2) INFORMATION FOR SEQ ID NO:1137:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 653 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

```

GAATTCGGCC TTCATGGCCT ACCACGTTTC CTCACCTGTA AAATGGACAC TGCAGCTATG      60
TCTGCTGTTT CACATTGTTG ATAGAACTGG ATGCTGTGGT GACATTTGGG ACACTATCAT      120
GGTGCCTGGG GTGGGTGGGT GCCCAGGCCT GTGGGCTTCT GTCTTTCATC AAAGAACTTC      180
AGATCCCAGA AAATTAAGAT TCTCAAAACA TAACTGTCCG AAAGGGCTTT TGAATCCACC      240
TTGGTGGCCT CTCCTGCCT CCAGGGCTCA TGAGATAGGC TGACTTCATA TGAAAGTTTT      300
GAGGATGAGG AAGTCTCTCT CCTCTTCAGA TACTACCCCT CTCTCTCCTT ATTTCTCTGG      360
TGCCCAAGAT AGGGCTTTGG TTATCTTGAA TGAATGAATA TAAACTCACA GGTGTGATCT      420
GAGCCACCTA AAGCCCTCTT TGGGTTCTGC TCAGCTTGAG GGCATCACCT AAAGGCCACT      480
GGCTGCATT TCCAGGAGGT GTTTTCTAAG CTGTATCTAT ATAGGAATGG GGAGGAAAGC      540
TAAGTCATTG TAGACTGAGA GAAAGGGAAT AAGAGTCTGT TCCAGACCAG CTAGGGCTGA      600
CAAGCTTAGG CAGCTGGGGG CAGAGGGCAC TGAGATGAG GCCCTAGCTC GAG              653

```

(2) INFORMATION FOR SEQ ID NO:1138:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

```

GAATTCGGCC TTCATGGCCT ACAAAAGGTT CTTGATGACC ACCACAATCC TCGCTTAATC      60
AAAGATCTTC TGCAAGACCT AAGCTCTACC CTCTGCATTC TTATTAGAGG AGTAGGGAAG      120
TCTGTATTAG TGGGAAACAT CAATATTTGG ATTTGCCGAT TAGAAACTAT TCTCGCCTGG      180
CAACAACAGC TACAGGATCT TCAGATGACT AAGCAAGTGA ACAATGGCCT CACCCTCAGT      240
GACCTTCCTC TGCACATGCT GAACAACATC CTATACCGGT TCTCAGACGG ATGGGACATC      300
ATCACCATTG TCGAG              315

```

(2) INFORMATION FOR SEQ ID NO:1139:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

```

GAATTCGGCC AAAGAGGCCT AGTTAATACT TATTTTATTT TCTGTTTTTA TCATCTAGTC      60
AACTCGCAAA CTTCCAGCAT TTGTCTAAAT CTACTCAATA TATTCCAGTA CATCAGATAA      120

```

```

TATATCAGTT TCATCCTCCT GAAAACTCT TTTCCAGTGT ATCCTGACCT GCTCTAATTT 180
TGACTTGATG CTTTCTGTAT CTGGTGCACA GCTGTTACCT TGGAACTTC CTTTCATCAT 240
TATTCAGAGT GTTTCTGTAG TTTTCTCTT GCATTGGATT TTGTGCTTCC TGAATCCTCT 300
CGAG 304

```

(2) INFORMATION FOR SEQ ID NO:1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

```

GAATTCGGCC AAAGAGGCCT AGGGTTTTGT TTGGTTTGGT TTTAGTTTTT TGTGGGAGAA 60
TTAAGATTTT TTAAGAGATA TTTTCAGATT TTTCTGTTGT CAGTTTGGT AATTTGTGTC 120
TTTTAGGAAA ATTTCAATTC ATCCAAGTTG TTGGATTAT TGGCATAAAA TTTTTCAGAA 180
TATTCCTTTA ATATCCTTCT AATGTCTGTA GAATCTAATC TGTATTGCAG TCTC TCATA 240
TTGTAATTT GTGTTTTTTC TATTTTTC TGGATCAGTC AGTCTAGCTG GGGAGAACTC 300
GAG 303

```

(2) INFORMATION FOR SEQ ID NO:1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

```

GAATTCGGCC AAAGAGGCCT AGTAGCTTAG TTATTGTTTA CTTGAAGCC CTTTGCCTC 60
TACTCTCTCC CATATATCTT CTCCTGACAG GGTGAAGTCA CCTATAGCAT TTCCTAGTGT 120
ATGGAAGTAT TAATTTCTTT CTTTACTGGA AGAGCTACTA GCTTTTCTTC ATACAGTTTC 180
CTCTGCTCCA GTTTCATAAG TTTCTTTTG GCTGTATCT GTTTAGGATC AGGTGATATG 240
GCTTCATTT TCATGACTGA AGCCCGGCAA CATAACACTG AAATTCGAAT GGCAGTCAGC 300
AAAGTGGCTG ATAAAACGGA TCATCTCGAG 330

```

(2) INFORMATION FOR SEQ ID NO:1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

```

GAATTCGGCC AAAGAGGCCT AGAGGGGAGC CTGGCCTCTG GCATATTCAT CAAGTATGAG 60
TTCTGGGGAT GAGTCACTGT AATGATGTGA GCAGGGAGCC TTCCTCCCTG GGCCACCTGC 120
AGAGAGCTTT CCCACCAACT TTGTACCTTG ATTGCCTTAC AAAGTTATTT GTTTACAAAC 180
AGCGACCATA TAAAAGCCTC CTGCCCCAAA GCTTGTGGGC ACATGGGCAC ATACAGACTC 240

```

ACATACAGAC ACACACATAT ATGTACAGAC ATGTACTCTC ACACTCCAGT CGAG

294

(2) INFORMATION FOR SEQ ID NO:1143:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

GAATTCGGCC AAAGAGGCCT AGTTTTAGTT CAGAATAACA TTAATTTTGA GAGATTGAGG	60
TAAAGAACCT TAACTAATGC TAAGGAGTTT ATTTTGATTA ACATAGGTTA TTCTGACCAC	120
CACCTCTTCC TTCCTTAATC TCCTTAGAAT CTGACAGTCT CAAAGCTGTC ACACAAATTA	180
GACTAATTTT GACACTTTGA AATGAAACT TCAAGGAAGA AGTAGCCACG GACAGTTATG	240
TTTATAATCA GTAGGTGGCA CTCTTCCTC AGGTAGCCCC CCATTTTCAC ATGATGTGTT	300
TGAAGGTTAA ATGCCACCAA AAGTGCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1144:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 508 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTCGGCC AAAGAGGCCT ACTTCAGCAT GACTACTCAG TTGCCAGCTT ACGTGGCAAT	60
TTTGCTTTTC TATGTCTCAA GAGCCAGCTG CCAGGACACT TTCCTGCGAG CTGTTTATGA	120
GCATGCAGCG ATATTGCCCA ATGCCACCCT AACACCAGTG TCTCGTGAGG AGGCTTTGGC	180
ATTAATGAAT CGGAATCTGG ACATTTTGGG AGGAGCGATC ACATCAGCAG CAGATCAGGG	240
TGCGCATATT ATTGTGACTC CAGAAGATGC TATTTATGGC TGGAACITCA ACAGGGACTC	300
TCTCTACCCA TATTTGGAGG ACATCCCAGA CCTGAAGTA AACTGGATCC CCTGTAATAA	360
TCGTAACAGA TTTGGCCAGA CCCCAGTACA AGAAAGACTC AGCTGCCTGG CCAAGAACAA	420
CTCTATCTAT GTTGTGGCAA ATATTGGGGA CAAGAAGCCA TGCGATACCA GTGATCCTCA	480
GTGTCCCCCT GATGGCCGTT CGCTCGAG	508

(2) INFORMATION FOR SEQ ID NO:1145:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 461 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTCGGCC AAAGAGGCCT AAATTGCTGG CGGATTTAGA CCGGTAGAAA ACCCGGGATG	60
GTTTATTTTG ATTGAGCCCC CTCTGGGTGG CAGAGAGGAG GCTTGGGCTC TGGGCCCTTT	120
ACGTTTGGAG AAATGGCTTT ATCAGCTCAG TTGAAAGGTT TTCCCTCTA GCTAGTGAAA	180
GATAAACTTG GAAATGCAGG TTTCTCCAGC GGTGTTGGT GGGGACAGGG GTCGCCTAGG	240

GAACCTGCAG	GGGCCGCGGC	CTCTGTTGTG	CTCTTCTGGA	GAGTGCACCTG	TTTGTGGAAC	300
TTTTCTAGAG	TGGCAAAAAC	GATCTCCACT	GTGGGTGAAA	GGGCAGTTCC	TGAAGTCAGC	360
TCATGGTCCT	GGCTCCCCTT	CTCCCCAGCA	GTGAACTGGG	GGTGACTTCC	TGATCTGCCC	420
AGCACAGGAG	AGCCCCGCAA	AGCGCCTGGG	AGGCCCTCGA	G		461

(2) INFORMATION FOR SEQ ID NO:1146:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

GAATTCGGCC	TTCATGGCCT	ACCATTTTGG	ATTGATTTTT	GTGTATAGTG	TAAGATGAAC	60
CCAATTTCTT	TCTTTAGCAT	GTGGGAATTC	TGTTTTTCTG	TCACCCTTTT	TTTTTGAGAT	120
GGGGTCTCAC	TATGTTGCCC	AGGTTGGCCA	TGAACTCCTG	AGGTCATGTG	ATCCTCCTTC	180
CTCAGCCTCC	TGAGTAGCTA	GGACTACAGG	CATGTGCCAC	TGTGCCTGGC	TCCAGCAACA	240
GTTGTTGAAG	AGACTGTTCT	TATTTTACTT	ATTGTATCCT	CTGTGCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1147:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 338 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

GAATTCGGCC	TTCATGGCCT	ACCCACCTGC	CCACGCCGAC	TTGGGAGGAT	GGTGGCCTGC	60
AGCGGCCAAG	AAGCCAAAAA	AAAAAATTTT	TTTTTTTTCA	GATACTGTGC	TTGATTTTTG	120
GAGAGGGGAG	AGGTGGAAAT	TCCTAAATGG	CTAATGCACT	GTTCCCTCCA	GCCCCAATGC	180
CTCCTGCCAA	ACCCCTTTTC	CCTGCTGCCT	CTGTCCCCGC	ATCCTTGTTT	TCCCCTGGGT	240
CCGAAACATT	TTTTCCGAGG	ATGAACAGGG	GACATCTTTA	GGTTTCTCAA	CTCTTGCTTT	300
GGTGTTCGCC	GCAGCATGGA	AAACAGGCAC	CCCTCGAG			338

(2) INFORMATION FOR SEQ ID NO:1148:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 385 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

GCAGGAATCA	GATTCACCTA	TTAGTAAGCC	GCACTCGCTG	AAGGGGAGAG	CATGAGCAAG	60
GCAGACGTGA	GCCACTGCGC	CCGGCCTGAA	GAGTTTTTGC	TAATTGGATA	TTAGGGAAAA	120
CCACAGGATG	GATTAAGACA	AGAGAGGGAA	GGTAAGGTTT	TAGACAGCAG	GATTATGTCT	180
GTTAGTTGGT	TTTATGTCAC	TTTTCTAGCC	AAGCTGTACC	ATCCTGTTTT	TGTTGGTTGG	240
TGAATGCTTC	CAGCTCTTTT	CCTCCAGCCC	TTGGAAGAGG	TGGTCCTATA	ATTGTTAAGC	300

ATCTAGCTAG GGTGATGAGT AGGAATAGCA ATAAGTGACA GGGAAGTTGA AGGCTGCAGG 360
GCTCTTTGCA GCGGCTTAC TCGAG 385

(2) INFORMATION FOR SEQ ID NO:1149:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 303 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCGGCC TTCATGGCCT AGTCACATGA ATGAGAGAAT TCTAAATGCA AGAAATGTGC 60
AAAGGCACAG AAACACAGAA GAGCATGTTG TACAACCTGG CTATAGTTTA GATTTTGTGT 120
GTGTGCTATG AGAGTGTGCG TGTGCTGTGA GTGTGTGTGT GGGCGCACGC ACGCATTGT 180
AGGAGGTAGG GAGAAAGAGT CCGGCATAAC ATGAAATGAT ATTGGACCTC AAATGGTATG 240
CTAAGATGTT TGACATTTT ATTCTAAGCA GTGAGTTTTT AAATTTAGAC ATGCAATCTC 300
GAG 303

(2) INFORMATION FOR SEQ ID NO:1150:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 419 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GAATTCGGCC AAAGAGGCCT AATTGAATTG TATTGGTCTT TTTCTCTTTA ATATTTTAGG 60
TGCTTTATTA TATATTAGGA TTATTAGTCC TTAGTTTGTG AAATAAGCTG CAAATATTTT 120
TTCCCAATT TTTCTTTTGT CTCTTGCTT TATTCTGGT GTTTATTTT CCCAGGTGT 180
ACTGTTTTCT ATAGCCAAAT TATTGATCTT TCTTTAATT GCTTTTTTGT TCACTCAAAG 240
GAAGGTTTTT ACCACTGAGA GGTATAAAA TAATTCATC ATATTTTAC TCCTTTTTTT 300
TGCTTATGTT AATTTTTTGT TTGGAACAAT CTCAAATTCA CAGAAGTGTT GTGAGTACGT 360
TGCAATAAC TTGTTTTTTC CTTATGCATT TCAGAGTAAG TTACCACTCC GCGCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1151:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC AAAGAGGCCT AGCGGATGGA GTCTTTGACA GTGTTTTTGA TCTCCTGCAG 60
ACGGCTGCTC AGGAAGCTGT TGACCCGATC CAGTTCCTGG TCGGGCCACT CCAAGAGCCT 120
CTCCCTGGCA GGCCTTGGCT CCGGCTTCC AGAAACACGA TTGCCTGCT TTAGAGCTTC 180
TGCTGCCAAC TGGGCCTTCT CCTTTTCTT CTTTTTCAGC TTGTGCCGGG CCCGCTTGGC 240
GGCCTTGGC CTGTTGGGGA CTTTGGGCTC CGTGCTGTTG ATGAATTCCA GCAGCTCATC 300

CACATCTCGG TGGTCCACGG CGGGCTCCCC AGGGATCCCG CCCAGGGTGC CCCCCTTCAT 360
GGGCAGCTCC TCTTTCCGCC TGGTCAGCCT CGAG 394

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC AAAGAGCCTA CTGTGAATCA CGAACTGGCT GAGGGCGGCT GACCGCTTGT 60
AGCTGTTCCG GCCATGCACC ATAAGAACCG GCCAAGATGC TTAAATTGAG TGATGGAGAA 120
GTCTGCAGCC AACGAAGCCT GTTTCCTTC CTTTCCTTCC ACTCCACGC CGCAGTCAGA 180
TTCCTGAATC ATGCTGACGT CATTGCCTCC GTCCCTACT GCACAGGTGA GCTTGCCCGT 240
GCGCTCCTGA AGCAGGCGCA CGATCTGGGC CTTCGGTG GGGGCACATC NGCAGCAGAC 300
TACGGCCGGG CACTGGCAGG CCAGCTCCAT GAACCGTAC TCATAGTACT TGAGGCAAAC 360
CTCCAGGGAG TCTCCCGAGA TGACCAGGGC ACAATCATGC TTCCTGCGGA AGGCGTTCAG 420
CTCGAG 426

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GAATTCGGCC AAAGAGGCCT AAGCTGATAT TTATGGACA TTTGCACCAT GCCAAGCATT 60
CGGCTGGAT TATCCCATTT GTTCTCACA GCCGGTATTT ATTGTCTGCT CCTCTGTGCC 120
AGGTGCTGTG CTCTGGGCG GGGCACTGCA TGGGCTGCCT GCCCTGGTGG AGCTTGTGGT 180
CTGATGGGTG AGGCTGACCC AAGCCCACCC CATTGCCAAC AGGGCCAGGG CAAGAGTACA 240
CACAGGGGCC TCATACCATA TGTCTCGAG 270

(2) INFORMATION FOR SEQ ID NO:1154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GAATTCGGCC AAAGAGGCCT AGCTGAAATC ATTCTGAAAA CTCAAACAGT AGACTTCAGC 60
ACACAAGGAA AGCCAAAGCC ATTTGAGGGG GAATAAGCC AAAAGCCTTT CACCTTATTC 120
GTTCCAAGAA TCTCACCGCC CCTCCTTAT CCCCCTCAA AAATAAGCCA TTGCACACAG 180
ACAGGCAGCA TGGCTAGCAA ACGAAAATCT ACAACTCCAT GCATGGTTTC GACATCACAA 240
GTAGTAGAAC AAGATGTGCC CGAGGAAGTA GACAGGGCCA AAGAGAAAGG AATCGGCACA 300

CCACAGCCTG	ACGTGGCCAA	GGACAGTTGG	GCAGCAGAAC	TGAAAACTC	TTCCAAAGAA	360
AACGAAGTGA	TAGAGGTGAA	ATCTATGGGG	GAAAGCCAGT	CCAAAAAACT	CCAAGGTGGT	420
TATGAGTGCA	AATACTGCCC	CTACTCCACG	CAAAACCTGA	ACGAGTTCAC	GGAGCATGTC	480
GACATGCAGC	ATCCCAACGT	GATTCTCAAC	CCCCCTACG	TGTGTGCAGA	ATGTAAC TTC	540
ACAACCAAAA	AGTACGACTC	CCTATCCGAC	CACAGACTCG	AG		582

(2) INFORMATION FOR SEQ ID NO:1155:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 279 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCGGCC	TTCATGGCCT	AGGATCCGTG	AGGGAGACCG	CATCATCCAG	ATTAACGGTG	60
TAGACGTCCA	GAACCGGGAA	GAGGCGGTGG	CCATCCTGAG	CCAGGAAGAG	AACATCAACA	120
TCTCCCTGCT	GGTGGCCCGA	CCTGAGAGTC	AGCTGGCGAA	AAGGTGGAAG	GACACCGACC	180
GGGATGACTT	CCTGGATGAC	TTGGCTCTG	AGAATGAGGG	GGAGCTGCGT	GCTCGTAAAC	240
TGAAATCACC	CCCTGCCCAG	CAGCCCGGAA	ACACTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1156:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 353 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GAATTCGGCC	AAAGAGGCCT	ACATTGTTAA	TATAATT TAA	CAGAAGTTGT	GAAACTAAAA	60
TTTTCTAAGA	TTAACTGGTA	GTTCATTGTA	AATGAACATA	ATGAACAGAA	TTTATGACTC	120
CACTGTGGAA	AATGCTATCA	AATAACTAAG	GAATATATAT	GGAATAAGTG	TACATATGTA	180
AAATATTGTT	ACTAGAGTTA	GATATGTGCC	AAAGTCCATT	TATCCCAAAT	CCTGTCTGAA	240
AAGGAGGGGT	ACATTGGTAA	ACATTTTGGA	GTGCTTAAAA	ATGCCAAAAA	CAAAATGTTA	300
ATTTCTACTT	TGATAAAGTA	AAAAAGTTAA	ATGTGTGTAA	AAAAGTGCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:1157:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

GAATTCGGCC	TTCATGGCCT	ACGGTGGCCT	TTGGGGCCGA	AGTGGGCGTG	CGGCTCGCGC	60
TGTTTCGCGG	CTTCCTGGTG	ACGGAGCTGC	TCCCCCGGTT	CCAGAGACTC	ATCCAGCCGG	120
AGGAGATGTG	GCTCTACCGG	AACCCCTACG	TGGAGGCGGA	GTATTTCCCC	ACCAAGCCGA	180
TGTTTGTGCG	TGAGAAAGA	TCGTCTTTCC	TCCCTCCCCA	TGACCGGGCT	TCCCGCGGGC	240

ACCTGTGCGT TTTCCACCCC GAGACGGCCT TTGTAGGGAC CCACTGCCCA CTCCGCTGCT 300
GTGCGCTGGG TTCCGCTCC TAGGGCTCGA G 331

(2) INFORMATION FOR SEQ ID NO:1158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

GAATTCGGCC TTCATGGCCT AAAAAGTTAG ACTGACATCT AGCTTTGACA ATCATAGTAT 60
GTTTTATTTT CCTGAGGGGG AATAACTTAT AATGCTGTTT AGTTTTGTAC TATTGGTGTG 120
TTGGTGAATT TTAAACTGT GTGCTAACTG CACGATTGAA TTCTAGACCT GCCTCGAG 178

(2) INFORMATION FOR SEQ ID NO:1159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

GAATTCGGCC TTCATGGCCT AAGCACTTTG GGATGTTGAA GTGAGGGGAT TGCTTGAGCC 60
CTGGAGTTCA AGACCAGGCT GGGCAATATC GCCAGACCCC ATCTCTTAAA AAAAGTAGTT 120
CTTTACTGTT GCCTCTATTG ACTCTTGAAT GCAAGAAAGA ACATTTGCC TTTGACTTCT 180
AATATTATCT TATATTCTCT CTTCTTCAAA AGATCAGAAG CACATGCTGT AAACATCAAT 240
CATGATCATC TTTGTCTCCC TTATCAGATT GTCAAAATTA TATCTTTTCC TATTTTCCTG 300
CATACCTTAT CTTTTCCTA AATTCTCAGT TCTCCAAGTT CTCAGAAATC ATAACCTCAG 360
ACCTTGAAAT GATGACTCTG TTCCACCCCC ATCGTCTCGA G 401

(2) INFORMATION FOR SEQ ID NO:1160:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GGGGGGCCAG ACACGCNTGG GGTAAGAAGG GCCTGGTGGG AGGAGTTCAC AGAGCAGACG 60
GTGCACTGGG ACCAGGAGAG CAGAACACAG GCCATAACTA TAGGGCAGGT GGGGCAGGAA 120
CGGGTTAAAA ACGAGATCCA AGCCAGCCAG ATCGCAGGAG GTGCGGGGGC GTCGTCCCCC 180
TTCTGTTCTC CCCCCAAGGT CACAGTGCAT GCAATAAAAT ATATATACAG GAGCTAGATC 240
CGTCCCTGTC AGGGGCTCTG AGGGTCCAGA GCTCCCTTCG GGTGGCGGGA AGCCAGTGGC 300
GCTCCCTGGC GGCCAGGCCG GGCTGGAGCC ACATGCGTCG GGGTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:1161:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 597 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

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GCCCCGGAGC ATCTTAAGAG CTGAGCGCAG CTGACAACTA GGGGCCGGAC CGTCGCAGGA      60
GGCGTCCGCT GGATACCTTC CCCCTTCCCT GACCTAGAGC TCTACAGCTG CTGCCTCGGT      120
ACTGACCGAG GGTTCACAGA GCTGTCTCAC CATTGCAAAA ACCTTATAGC AACAGCCTCT      180
GATTACGACA TGGCTGAGAT CACCAATATC CGACCTAGCT TTGATGTGTC ACCGGTGGTG      240
GCCGGCCTCA TCGGGGCCTC TGTGCTGGTG GTGTGTGTCT CGGTGACCGT CTTTGTCTGG      300
TCATGCTGCC ACCAGCAGGC AGAGAAGAAG CACAAGAACC CACCATACAA GTTTATTCAC      360
ATGCTCAAAG GCATCAGCAT ATACCCAGAG ACCCTCAGCA ACAAGAAGAA AATCATCAAA      420
GTGCGGAGAG ACAAGATGG TCCTGGGAGG GAAGGTGGAC GTAGGAACCT GTTGGTGGAC      480
GCAGCAGAGG CTGGCCTGCT AAGCCGAGAC AAAGATCCCA GGGGGCCTAG CTCTGGATCT      540
TGTATAGACC AATTACCCAT CAAATGGAC TATGGGAAG AACTAAGGAA CCTCGAG      597

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(2) INFORMATION FOR SEQ ID NO:1162:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 476 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

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GAATTCGGCC TTCATGGCCT AGAAATAACT TAAATCCTG AATCAGATGT TTCTCCGTAC      60
ATGGCCTATC CAGATACCG TAGGGTGAAG CTCAAAGTCA GCAAGCCTCA CCCACATACT      120
CAGAGCTTCC TTTCAGTGT GAGACCTTCT TCCCTCTGAG CAGATGACAA AGGAGTTTGA      180
AACCAGCCTG GCCAACATGG TGAAGCCCCG TCTCTACTAA AAACACAAAA ATTAGCTGAA      240
ATGGTGAATG TAATCCAGC TACTCAGGAG GCTGAGGCAG GAGAATCGCT TGAATCCGGG      300
AGCGCGAGGT TGCAATGAGC TGAGATCGTG CCATTTTATT CCAGCCTGGG CAACAGAGCA      360
AGCCATCACA GATTTGGGAG CAACCAAGAA AGCCAGGGAC AGGGTATGCT TGATAACCTG      420
GCAAGAGCTG ACAAAGGGGA AAAATAAAAC CCCACAGAAA GAGCAGGGAA CTCGAG      476

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(2) INFORMATION FOR SEQ ID NO:1163:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```

GAATTCGGCC AAAGAGGCCT AGATGAACAT GAACCTGCGG GAGCTGTACC TGGCGGACAA      60
CAAGCTCAAC GGCTGCAGG ACTCGGCCCA GCTGGGTAAC CTGCTCAAGT TCAACTGCTC      120
CTGTGAGATC CTGGACCTCC GGAACAACCA CGTGCTAGAC TCGGGTCTGG CCTACATCTG      180
CGAGGGCCTC AAGGAGCAGA GGAAGGGGCT GGTGACCCTG GTGCTGTGGA ACAACAGCT      240
CACGCACACA GGATGGCCT TCCTGGGCAT GACACTGCCG CACTCTCAGA GCCTGGAGAC      300

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GCTGAACCTG GGCCACAACC CCATCGGGAA CGAGGGTGTG CGGCACCTCA AGAACGGGCT      360
CATCAGCAAC CGCAGCGTGC TCGCCTCGG GCTGGCCTCC ACCAAGCTCA CGTGCGAGGG      420
CGCGGTGGCG GTGGCGGAGT TCATCGCTGA GAGCCCCCGC CTCCTGAGAC TGAACCCTCG      480
AG                                                                 482

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(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

```

GAATTCNGCC AAAGAGGCCT AAGGAGCGCT GTTAAAGCTG ATACATTCCT GTGGGTCAAC      60
TATGCAACTA ACTCAGATTT TGAGCAAACA AAGCTCTCAA GTTGGTGATC CTCAGGAGTC      120
TCTGCATTAG TTGGT CAGCT CTTCTGGAAT TATCTTCTAA GTCAACTGTG GGTGGGGTAG      180
GTGGCTCTGC TGATTTTTTCG CTGGACTTCC ACATTTGGGA CCAGTTGGCT GTNATCAGCT      240
CTAGAAAGGG TGTGGCTGTT TTACATTGGC TGTTTCCTC ACATTCCTCA AGCAGGTA CT      300
GTAATAAAGA ACTGGAGAAA TACAGTCAGA TGGGAAGTAG CCCCTGCTGT CAAGGAGCTT      360
GCCATCTAAT GGGGGAGACA GGCAAGTAAA CCAAAGACTA CACAGTGCAG TATGGTAAAGT      420
GCCATGATTT TGATGTGACA GGGCACAGTG GACGACCTTC CAAATCAAAG CAAGTAACTA      480
GGGGCAGACT CGAG                                                                 494

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(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```

GAATTCGGCC TTCATGGCCT AACTCTTATC TGTGAACACA ACTTTTCAGC ACTACAAATG      60
CAAGCAACTG CGCAGTCACA GTTGGGGCTG CTAATTGGA AATCCAGTTT AGGCTGATTT      120
GAAAAGACAA CAGCATTTTT GCAATCACTG GTGTATCCTT TACGAGAGAG CTAGTCATGC      180
CATTTTTTGT TTTCTGAAGA CGGCCTTTTT TTCTTTTTTA TTATTATTAT TTTTAAAT      240
TTGGGATCTT GCCTAATTCT TTAGTACAAA GCCTGGCCCT AAAACCGTAG AGCTCGAG      298

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(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

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GAATTCGGCC TTCATGGCCT AGATAGAAAA GAATATTCCA AGTGTATGAA GTATAGAGGT      60
GGGGAAGTTC AGGGTAGAGA AGTANTAGCA GGAATAGAAT ATAGGGGGAC AGAAAAATAG      120

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AGTGGAGCCA GATTCAGAGA ACTTTNAGAA GCAGGTAAAG AAGTTTAGGA TTAATGGACA	180
AGTCATTGGG TCTCCAGGTT TCTTTGAGGG AGAGTGATAT CTGAGCTCTG TTTTAGAAAG	240
ATTAATCTGA AAGGAGGTAA CTCGAG	266

(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

GAATTCGGCC TTCATGGCCT AGGTAAATAA TGCCAAGTTA CTGGGGTCTA GAAAGAAAGT	60
TTTCTCTTGG ATCAAGAGAG TGTGAGTTTC CTAAGTTTCT TCAGCAGGGA TGTTGGTCCT	120
TTAGTTAGGA GGTTTAAAT CACCAGGAAG TAAGGGAGAG GAAGAAAGTC TGGGTCCATG	180
TTTGAGAAGG TGA CTGATGG TGGTGAAGT CCTTCC GTG ATGAGTTAAT GATGCGTATT	240
TCTGATAAAG ATGGGAAGTT ATTTACATCG ACATTACCA AATCTACCTT TCATGCAGAA	300
AGAAAGAGCT CTTGGGCCAT TCTCTATTAA TGAAACCATA CCAGGGTCAA TATTACAGTG	360
TCTCTGAAAT ACACTGAAAA TACTTCCCTG GCTCAGGTGG TGGCCCATGC TACCTCCAGG	420
CAGTTCTACT TGATTAATGA TGCAATGGAG ATAATCCTAT TGCATCCACC ATCAAGGAGA	480
GTTGGGCAGT CAACTCGAG	499

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

GAATTCGGCC TTCATGGCCT ACACAAACAA ACCCAGAATA CTCTATTACT GTATTGTGG	60
GGTACAATCC ACTCAACTCT ATTATGAAGC CCAAAAAATA AATCTGTTAA AAACAATAAT	120
AGCTACACCA ACCTGTTAAG AGATAGGTAA TATAAAAATA TATAGTTTGA GACAACTAAA	180
TCAAAATGGA GGAGGGGATA GAGTTCAAGA AGTAGAATTT TTTGCGTGT GCTTTTCTTG	240
GCCTTTGTTT GCTTCTATTC TTTTATTTGG AATCAAAGAT AAGTTATCAA CTCTTTAAAA	300
TAAC TTGTTA TATGTATAAG ATGTTTTCTG TAAGCCTCAT GGTAACCACA GTACAAAAAC	360
CTATAGTACA ATTCCTAAAA ATAAAATACA AAAAAATTAA AATATACTAC CAGAGAGCTC	420
TCGAG	425

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

GAATTCGGCC TTCATGGCCT AAAAGGTTTG ATCTTGTAAT GTGTCAGTGT GTTTCCTTAG	60
TGGCCAGCCA GCCTTCAGAA TAGCTAAAGG CCTTCCTTCC TTCCAGTCAG CCTGAGAGAG	120
AACACCTGTC CCCTAAGCAC CTGGTGTCTC CATTGGAGGC AGACTGCTCT CAGGAGACTA	180
CTAGAAGCTT CAGCCCGGAA GACAGGCTGC TCTCTCATGC TGGTGGCCCA AATTGAGAAA	240
GTGGTGTCCC TTCCTGATTT TGCCACCAGC CCTACCGAAT AGTTGTAAAC CAGTATCAGG	300
AATTGGGATC CTCTCGAG	318

(2) INFORMATION FOR SEQ ID NO:1170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

GAATTCGGCC TTCATGGCCT ACATTGGTCG TTTTATTGCC ATGGCACTAT TTCATGAAA	60
GTTTATCGAT ACTGGTTTCT CTTTACCATT CTACAAGCGT ATGTTAAGTA AAAAATAC	120
TATTAAGGAT TTGGAATCTA TTGATACTGA ATTTTATAAC TCCCTTATCT GGATAAGAGA	180
TAACAACATT GAAGAATGTG GCTTAGAAAT GTACTTTTCT GTTGACATGG AGATTTTGGG	240
AAAAGTTACT TCACATGACC TGAAGTTGGG AGGTTCCAAT ATTCTGGTGA CTGAGGAGAA	300
CAAAGATGAA TATATTGTT TAATGACAGA ACGGCGTTTC CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:1171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

GAATTCGGCC TTCATGGCCT ACACCTTATT CCCTTTTAAG TCTGGTAAAG AATGAATACT	60
TGGACGTTTT GTTTCATGCA GATTTAGTTA GCAACTCGAT TATCAAATGG TAGAATATCT	120
GTATGCACTG AAGCCAAATT CTCAGTAACT CAGCTTTTGN TAGTCATATG AGGATGATGA	180
ATAATAGGAN TCCAGAGCAG TTAACAAATT GATACAAGTG GTAGGAAAAT TTGATATGAA	240

(2) INFORMATION FOR SEQ ID NO:1172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

GAATTCGGCC TTCATGGCCT AGTTTCNTTT TTGTATCTCT ACTGATATCA CCAGGATAGT	60
NTACTCTCCT TCTAGCTTTC TGCTTACC GC ACACACACAT ACACACCCAC	120
AAAAATGCTC ATGAACCCAA TCCGGAGAAG GTTCCAGCAG GTCCCCCACC CTCCCCCTCT	180
CCTCCTACTT CTCCTCTTGA CAGCGAGGAC AGGAGGGGGA CAAGGGGACA CCTGGGCAGA	240

CCCCCGGCT CTCCCCCAC CCCACCCCA TCTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1173:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC TTCATGGCCT AGAAAAGTCT AGAAAATAGC TTAAATAACA AACACGTGTG	60
GATTTGTTAG ACCAAGAGCA AGGGAGACCA TTTAATGCAG TTATTTAACA ATATTTAGTA	120
CTTTCCTTTA CTTGTCTGTC TGTGCCATCA TTCATGCCTG TCAGTGTTAA AAATCCCCAA	180
ATTTCCCAAA CAGATTTTCA TTCACTTCC GTCAACTTTT AAATTAAAGT TTTTAAATTC	240
CTGTCCCCAC TCCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1174:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAAAGTTGCT TTTGATGTCA AAATGGAAAA TGAAAAGTTA GTTTTAGCAT GTGAAGATGT	60
GAGGCATCAG TTAGAAGAAT GTCTTGCTGG TAACAATCAG CTTTCTCTGG AAAAAACAC	120
TATTGTGGAG ACTCTAAAAA TGGAAAAAGG AGAGATAGAG GCAGAATTGT GTTGGGCTAA	180
AAAGAGGCTG TTGGAAGAAG CAAACAAGTA TGAGAAAACC ATTGAAGAAT GTCTTGCTGG	240
TAACAATCAG CTTTCTCTGG AAAAAACAC TATTGTGGAG ACTCTAAAAA TGGAAAAAGG	300
AGAGATAGAG GCAGAATTGT GTCGGCCACT CGAG	334

(2) INFORMATION FOR SEQ ID NO:1175:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 403 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCGGCC TTCATGGCCT AGTGCTTGAA CTCACGCATC TGTTTTACCT GCATCTGCAG	60
GCGATGGGGC AGGGGCCACG GAAAGAGTCT GAGGGCTGCT TGGTGTAGTC AGGTTGTGTC	120
CAGGCATGCG GAGCTGTGAG TGCCTGCAGG AGAGACACCC AGGAGGAGTT TTTACATTTT	180
GGTCTAAAAA GCTCTTGAT TCATCTCATC TCATGGAATG ATCCTGTCGG ATGACGCTGA	240
CGTGATTGCT TCAGACTTAG AGGTGAATAA ATTGAGGTCC AGAGAGGTCA CAGTCACGAA	300
GCTCATGGTA GACTGAGGCC ACTAAACACC CGTCTCCTGA TTTTCAGTGG CGTCCTCATT	360
TGCATACACC TGGGCCATCT TGGTTTTTGC AAGAAACTC GAG	403

(2) INFORMATION FOR SEQ ID NO:1176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

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GAATTCGGCC TTCATGGCCT AGGTACCTTG AACATGGCTG TAAATTAATC TTAACTGCC      60
TTGGTGGAGT CTTCTGATT TATTGAAGAG AATAATCACG AAAATAATT TTGTTGTTT      120
TTTGAGACGG AGTCTCGCTC TGTCAACCAG GCTGGAGTGC AGTGCCACGA TCTCGGCTCA      180
CTGCAGCCTC TGCTCCCGAG GTTCAAGTGA TTCTCTGAT TGAGCCTCCT GAATAGCTGG      240
GATTATAGGT GTGCACTACC ATGACCAGCT AATTTTGTG TTTTGTAGT AGATGGTGTT      300
TCACCATGTT GGACCGGGCT GGTCTCGAAC TCCTGACCTC AGGTGATCTG CCCTCCTCAG      360
CTTCCCAAAG TGTGGGATT ACAGGCATGA GCCACCGCAC CTGACATAAA TATTTAATGT      420
AATACCGTGT AAGACTTTTC CATTGGGTTT TGAGAAACAC GTTAATGAGA GAAATTGCTT      480
AACATTGGAG AGGATTGCAG AGAATATTGA CTAATATGGT GGGGTGAGGA GGAACAACAT      540
CAATTAAGAT TCAGATTTAT TATTTAAAAA AACTAAAAGG CGGCCTCGAG      590

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(2) INFORMATION FOR SEQ ID NO:1177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

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CTCGAGGTAG CCACAGTCCT GATCCTAGTG ACAAATGGGG GCATGTGTCT ACATCCGGGT      60
CGGCGGAGGG CTCATTTCAT CTGGCCTGGG GGGAAATGAG TATTAATTTG TTTACACAGA      120
CGTAAACACA GCCCAAACG CATCAGCACG TTGACTCAA CGCCCGCAAC GCCAGGGCAA      180
AGGCAATTTG GTTAACAGGG GGAAGCGAAC AGACGGAGAC GCCTGGAGAC CCAGGTGCCA      240
CAACCCGGTT AATCGCGGTG CAAATAAGGG CAAGTCCCT CCCCTTGTCC GTGTGGTCTT      300
GACAACGACA CTAGTTCATT CTACTAACAA GGCGGGCGGG GGGTCAGATG GGCCACACAC      360
ACCCATTTTC CTCAACGGGA CCCCAACGCG ATCTCAGCCT TGCTGTGCTA CTTTAGGGCA      420
AGACGCGTTC CCCATTCCGA AGCCGCAGGA AAGCGCGGCG AGAGCGGGTT AGCCCTCGGA      480
GCGGCTAAGA GCCTCGGAAT AGCGCAGAGG AAGTCCCAC CCCTCTCGGG GCTGGGAGCC      540
CTAGGCCATG AAGGCCGAAT TC      562

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(2) INFORMATION FOR SEQ ID NO:1178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

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GAATTCGGCC TTCATGGCCT AGAAGCACAG GTAAAACAAG CTGGGGCTTA TGGTGAGCAT      60

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TGGAAGCAGG	GAGCAGAGTG	GGGAAAACAG	CAGTCTTATG	GGACTGAGTC	CTCAATCTGT	120
GTGATCTGAC	TCTATCTGCA	AGGTAGTGTT	GGAAGTGAAC	AGGGTTGGAG	AATGCCCAGC	180
TGGTGTCCAC	CGCAGAATTG	ATTCATGTT	TGGTATGCAG	GGACCCCCCA	CTCCACACTT	240
AGTCACAGAA	ATCTGTGTTG	ATTGTTGTGG	CATGAAAGCA	GGGAAAAATA	GTTTGTTTTT	300
TTCTCCACAC	TTCCTTCCCA	AGATCCCGGC	TAACCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:1179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

GAATTCGGCC	TTCATGGCCT	ACTCACCGGA	GAAAAGAAGT	TTCNGAAGAA	AACCACAACC	60
ATGCCAATGA	ACGAATGCTA	TTTCATGGGT	CTCCTTTTGT	GAATGCAATT	ATCCACAAAG	120
GCTTTGATGA	AAGGATGCG	TACATAGGTG	GTATGTTTGG	AGCTGGCATT	TATTTTGCTG	180
AAAACTCTTC	CAAAAGCAAT	CAATATGTAT	ATGGAATTGG	AGGAGGTACT	GGGTGTCCAG	240
TTCACAAAGA	CAGATCTTGT	TACATTTGCC	ACAGGCAGCT	GCTCTTTTGC	CGGGTAACCT	300
TGGGAAAGTC	TTTCCTGCAG	TTCACTGCAA	TGAAAATGGC	ACATCTCTCT	GAG	353

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

GAATTCGGCC	AAAGAGGCCT	ACAGAGTGCT	GTGCTTAAGT	TTTACTTCTT	TCCACCTTTA	60
AATCTCTGAT	AAGTTTCTTT	TTATCTAAAG	GTTCCACTTT	GTTTCATTACT	TTTGTTTTCC	120
TTATTATTGA	TTTGTTTCGAG	AACCTGAGTT	TCTTGACCTG	TGTGATTTTG	TACCACCTGG	180
ACTTCTGAC	TGTGTTTGCC	CAGGCTGGAG	AGCAGTGGTG	GGATCATAGC	TTACTGGACT	240
CAAGCCATCC	TCCC GCCTCA	GCCTCCCAAG	TAAC TGGGAC	TATGGGCACA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

GAATTCGGCC	TTTCATGGCCT	ACTTGAGTTG	TACATTAGAT	CTTTAAACTT	GTTAGTCCTA	60
CATATCTGCT	ATTTTTTATC	CTTTGACCTA	CATTTTCCCA	TTTCCTCCCA	GTGTCTCTC	120
CCCAGTAAT	CATTGTTTTA	TTCCCTTTCT	CTGTAAATTT	GACTTTTTTT	TTTGGATTCC	180
ACATATAAGT	GAGATCATGA	TCATGCGGTA	TTTTTCTTTC	TGTGTCTGGC	TTATTTCACA	240

TAGTATTATG TCCTCCAAGT CTACCCACGA ACTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

GAATTCGGCC	TTCATGGCCT	AGAGATACTG	GCTGGCAATT	CTTGGCGTTC	CTTGGCTTGT	60
AGCTGTAAGA	TGCGCTCTAA	TATCAGTCTC	TGTTGTCATT	TGCCTTTTCT	CTGTGTCTGT	120
GTTCAAATGT	CCTTTTTTTT	TTTTTTTTTA	GGGAGTCTTG	CTCTGTTGCC	CACTCAAAC	180
GCTGGGCTCG	AG					192

(2) INFORMATION FOR SEQ ID NO:1183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

GAATTCNGCC	AAAGAGGCCT	AGTAAATAGT	TGTTCTGTTA	CATTGTTTAG	AGAATAATGA	60
CAAGAACAAA	AATCTGTGTG	TTCAGTATAG	ACACAACCAT	CCTTTTCTTT	TTTTTTTTTT	120
TGAGACAGAG	TCTCGCTCTT	GTTGCCCAGG	CTGGAGTGCA	AGGGTGCGAT	CTCAGCTCAC	180
CGCAACCTCC	GCCTCCCGGG	TTCAAGCAAT	TCTCTGCCT	CAGCCCCCGG	AGTAGCTGGG	240
ATCACAGGCA	TGTGCCACCA	CGCCCGGCTC	TTTTTGATT	TTTAGTAGAA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

GAATTCGGAC	TACTACAGGT	GATACTACAG	TGACTACTAC	AGTAATTCGG	ACTACTACAG	60
GTGGCTAATT	CGGATTACTA	CAGGTGGACA	TAATTCGGAC	TACTACAGGT	AATTCGGACT	120
ACTACAGGTG	AGCTAATTCG	GACTACTACA	GGTGGACATA	ATTCGGACTA	CTACAGGTGC	180
ACCTGTAGTG	GAGAACATTT	AGCAATGATA	AAGCCGCTGC	TGATCCTTCT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:1185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

GAATTCGGCC	AAAGAGGCCT	AGAACAGTTT	AGAAACAATT	TCCCTGCCTT	TGCTTTGGGT	60
TCCCTGTGAT	TGTTCTCCAC	ACTGTTTTCC	TGGCTCTATC	TGTCTCCCTT	GCCACGGCCA	120
CTCAAGCCTA	GCTGCCAAC	AGCTCCTTCC	CTGAAGAACC	CCGGCCTTCA	GGCTTGACAG	180
GTGATCTCAT	CCCTCTTCTT	TTCCTCCAGG	TTGTTGTAGA	CTTCCACCTT	CCCTTCTTCT	240
CCTGGTCCTT	TCCCCTTTCT	AGTGCCAATG	TGGGCCACGC	TTTCATCCCA	CCTACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 324 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

GAATTCGGCC	TTCATGGCCT	AGTGATGAGC	CCTCCTCTTC	AGCTAGGAAA	ATGACGGTGT	60
TCAGAAAGTT	AAAACCTCTT	CGCTGGAAGG	ATTTCATCTT	AAAGTTGGGA	GACTGGAAGA	120
AATTAAAGTG	TTCTAAATGG	AAGAGCATTC	ACCACATGTG	TTCTGTTTTG	GGTTGACATT	180
TAGCTTTTGT	TTTTATTTTA	GAAACGGAAG	ACTCTGGTAG	CAGTCCTTGA	AATCTTGATG	240
CCATTGCTAT	TTTCTGCATT	GTATTGTATC	TTCGTTTTAG	TAGTGCTCCA	ATAAAAAGAC	300
CTGCTACTAG	CTGCAAAACT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

GAATTCGGCC	TTCATGGCCT	AGTACGTTGC	TGAAAAGAAG	TTTATTGCTA	TTTTCTTATT	60
TTATTATACA	AAACTAGATT	TGCTTAAAAC	ATTCCCAGT	CTCTTTAAAG	GAATGCTAGT	120
TAGTGGGAGG	CCACAGCTAG	TAAATTACCC	TCAGTAGTGG	TTTCAAGTAG	TCCATAACTA	180
TAAAAATCGT	TACGGCCAGG	ATATGCCGGA	ACAGAACT	CCCCACTGGG	GTCTCAGCC	240
TTGGATGTCA	GCTCGGCCCC	TCAAGGGGTC	CCTACACCTG	GAAGCTGATT	CCACTCATCA	300
GTCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

GAATTCGGCC	TTCATGGCCT	AGAATGAAGA	AGGTTCCCAA	GAAGTTAGAG	GAGATTCCCC	60
CAGCCTCTCC	GGAGATGGCA	CAGATGAGGA	AGCAGTGCCT	GGACTATCAT	TACCAGGAGA	120
TGCAGGCTCT	GAAGGAGGTC	TTCAAGGAGT	ATTTGATTGA	ACTGTTTTTC	TTGCAACACT	180
TTCAAGGGAA	CATGATGGAT	TTCTTAGCTT	TCAAGAAGAA	ACATTATGCC	CCATTACAAG	240
CACCACTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

GAATTCGGCC	TTCATGGCCT	AAGGAGTTGG	AAATTGTGCA	CAAAGAAAGG	TGGTGAATAA	60
GTAAAGTCGT	AAATTCAAGA	CCACAACAGA	AAGCTTCACT	GCAGACACTG	GACTTGAACC	120
ACCATTGAAA	ACAGTCAGGA	TTTGGAGATG	ATAATTAGGA	GGATGTGTAT	TCTAGCTGTG	180
GAATTTATTG	TGGGCAAGCA	TAGGAATGAG	AAAGTACAAT	GAAAAAATGT	AAGTAGACCC	240
ACCAAGTTAG	AGAAGAAGGT	CCTGGTTAAG	AAAAATGAAA	GATTTTTTTG	AACAACAGAT	300
TAATGTGATG	AAATAGATGT	TCAAGAGTGA	AGATAAGTTG	AAGATAGGGA	CCCCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

GTGTTAGGC	TGGTGTGTT	ATGTTGCTGT	TGTTATGCTG	GTCGTGCTGC	TCCATGTTCT	60
CCAGGTGTTT	TTCCCTTTTA	TCGTCACAGT	TACCCCGTAC	ACCTGACAAC	TGGACATCTG	120
CGCCTGGGGT	CTTCAGCCTA	AACACACCTA	AACCTCCAC	CAAACCCCTC	TGCTTCCGCC	180
TCCCCGTGTC	TGTGAGCGCC	TCCACTGCC	ATCCCTCTGC	TCAGGCCCCA	TTTCCAGGGC	240
TCGAG						245

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTCGGCC	TTCATGGCCT	AGTCTCAAAA	AAAAAAAAAA	AAAATAGTGT	TCAGCAAGGT	60
TGAAGCATAA	AAGGTTAATA	GCCAGAATCA	TTTATCAATT	GTATTCTAT	ACATCTACAA	120
GACACAATCT	GAAAATGAAA	TTAGAGAAAC	AATTTCACTG	GGCAACAAGA	GCAAAACTTC	180
ATCTCAAAAT	AATCATCATC	ATCATCATCA	TCATCATCAT	CATCATCTAC	AATGTCATTT	240
CCCATCCAAC	GCTCGAG					257

(2) INFORMATION FOR SEQ ID NO:1192:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 748 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

GAATTCGGCC	TTCATGGCCT	AAGGACATGG	CAGAGTTCCT	GCTAAAAGAG	AAGACAGTTA	60
TTTAAGGAGG	TTTGAGATTC	AAGGGCTTTT	TTAATTTTAA	AATTAACCAT	GGTAGAAACC	120
TGTGTGTTAA	TATGCTGAGG	GAAGTTGCCA	ATAGTGAGAT	GAAAGATCTA	GGCAAGGGGA	180
TAGCAAGGTG	ACTGCACCAG	ATACCTGGAT	CTGGGCAGGA	ATAAACCTCA	ACAGTGATCA	240
TGTTGACCTT	GAGTGACAGG	GTATAATGTT	TGGGAAGGTG	CTTGTAAC	TATAAGGGGC	300
AATACAAACA	TGTAGTACAC	CTTCTCTGAG	ATCCGGGAAA	GGACAACCTG	AGCATAGGTT	360
GGGGCTGGTC	ATAGGCCACT	CTCCCCTACT	GTTTCTCTAG	AGTGTGTGTA	GTCCCTAGCA	420
AGTCTCAGAT	GCCTCGACCT	TCATGGCCTA	GAGAGTTCTC	ATCAGAACAG	GAAGGCAGTG	480
ATGATCCATT	GCATGGGCAG	GATTGTTCTA	CGAAGACGAA	GATCTCCGGA	AAGTGAAGAA	540
GACCCGGAGG	AAACTAACCT	CAACCTCTGC	CATCACAAGG	CAACCTAACA	TCAAACAGAA	600
GTTTGTGGCC	CTCCTGAAGC	GGTTTAAAGT	TTCAGATGAG	GTGGGCTTTG	GGCTGGAGCA	660
TGTGTCCCGC	GAGCAGATCC	GGGAAGTGA	AGAGGACTTG	GATGAATTGT	ATGACAGTCT	720
GGAGATGTAC	AACCCAGTC	GAATCGAG				748

(2) INFORMATION FOR SEQ ID NO:1193:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 227 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

GAATTGCGAA	CATGGCAGCG	CGTTGGCGGT	TTTGGTGTGT	CTCTGTGACC	ATGGTGGTGG	60
CGCTGCTCAT	CGTTTGGCAG	GTTCCCTCAG	CCTCTGCCCA	AAGAAAGAAG	GAGATGGTGT	120
TATCTGAAAA	GGTTAGTCAG	CTGATGGAAT	GGACTAACAA	AAGACCTGTA	ATAAGAATGA	180
ATGGAGACAA	GTTCCGTGCG	CTTGTGAAAG	CCCCACCTAA	TCTCGAG		227

(2) INFORMATION FOR SEQ ID NO:1194:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

GAATTCGGCC	TTCATGGCCT	AGTATATATA	TAAAATACTG	AGGATTTAGG	GCTGATGTAT	60
ATAAATAAAA	TACTGATAAC	TTTTTTCCTT	TCTTTTCTT	TTTTTTTGA	GATAGTGTCA	120
TGCTCTGTTG	CCCAGGCTGG	AGTACAGTGG	CACCAAACCG	CTAACTGCAG	CCTTGCCCTC	180
CCAGGCTCAA	GCAATCCTCC	TGCCTCAGCA	CCCTCAATAA	CTGGGACCAC	AATTGCATGC	240
CACCAAACGC	ACCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:1195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

GAATTCGGCC	TTC	IGGCCT	AATGAATTCT	CATTTCTGG	AGGCTGAAGA	TCTGTGCAGG	60
TGTCTGTGGC	CAATGTTAAG	CCTACGACTT	TAGATGAGCT	GGCATAAATC	TTGGGAGAGT		120
TTTCTTGCT	GTGTTCCCTC	TGAATTCTCT	TGTCTGTGTA	GAGGCAGGGA	CAGAAGAGAA		180
CCAGCATGGC	AGTGCTGGGC	TCAGGGTGAT	GCCTGCCTGC	CAGCACAGCG	GTTCTTGTC		240
CTGTCCACA	TGCTTCTTG	GAAGCCTTTT	TACAGCCTCA	ATCATCTTGC	TTTTTCTACC		300
GCAGCTATCT	CGAG						314

(2) INFORMATION FOR SEQ ID NO:1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

GAATTCGGCC	TTCATGCGGG	GACTTCCACT	CTTTCTCGTT	TTCTCGGAGC	TCCGCCTCCA	60
GCTCCTCTAT	CTTCTCTTC	AGCTGCGTGT	TCTTCTCCTC	TCTGTGGATC	TCACGGCCTC	120
TTCTCTGCT	CCACGCTGGC	CACCGACTCC	TGCAGCGCCG	TGGGCAGCCG	GGCGTCGCTC	180
TCCCGCCGGG	TCTGCAGCTC	CATCTCCCAC	CTCTCCCGT	GGGCAGCTCT	CTGCGTCGAG	240
GCCGCCTTCA	GCTTGTTGGT	CCCAGACTGC	AGGTGCGTGT	CAGCTGCAGC	GGCCTGAGAG	300
GCCTTTCATC	GTCCGTCCCG	TTGACACTGG	ATGCCGGAGT	AGAAGATGGG	GCTCCATGCC	360
CGGATTCTCG	GGATTATTAC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:1197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

GAATTTGCAG	TGAACCGAGA	TTGTGCCATT	GCACTCCAGC	CTGGGCAAAA	GAGCAAGACT	60
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CCATTTCAAA AAAAAATCTT AAAAATACGA AGTTTTTCAT TTTTCTTAA TTTTCATTGT      120
GACTACTTTA GTAGACTTGC CAGTAATAAG CCAGTTACCG CTTGAATCTC AGTTTCTTTA      180
TCTGGAAAGT GGTCAATTAT TATCTGCTGT CCCCTTACCT AGAGGGAATC AAATGCGTTT      240
GATACAGGTT CTCGAG                                         256

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(2) INFORMATION FOR SEQ ID NO:1198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

```

GAATTCGGCC TTCATGGCCT AGAGAGCCCA TCTCCATCTG CCAGCCTGGA AGCAGCCATG      60
GCAAATGGGA TGTGTCCAC TGCCCCCGTT TGGTGCCACA GTTGGGTTTA TTCTCACAGC      120
TGCAAACCCA CGTGCTGGGC TGCACAGCTG CCTGACGAA GCTGGAGCGT GCAGAACAAA      180
CTGCATGGAA TGTCACGTGG GGTTTTCCAC TCTGCCCCAC AGTGAGTTGG CAATGCCTGG      240
CCACGTGTGC TCTGTGGTCT TTGAACTTGA TCTGGGAGGA CAGAANTTCA AAAGGAAGAT      300
GAAGGCCCCA GCAAGGGAGG TATTCCTGTC TTGAGCAGAA GGTAAAGGTA GAAGGTGCAG      360
ATTAGGTACT GGAATAGTC ATGGTTTGGT TTGAATGGAG TAGAAGATTC CAGAGGAAGA      420
GCAGTGGGGC ACAGTGGCTC CTCGAG                                         446

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(2) INFORMATION FOR SEQ ID NO:1199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

```

GAATTCGCCT TCATGGCCTA AATTGTAGCT AGGAAAATAA TATATGTCTT AGTTTAAGAA      60
CTCATACTCT GGAATCAACT CATTGCACTT TCCTATATGT TTGGCCATGG GCAAAGCACA      120
TAACCTCTTA ATCAATTGGC TCGTCTCCAA GGTGAGGATA GTTATACTTA ATCCTCTTTA      180
GGAGTGAGAA TAAAAATTAA ATATGTGTGT AGCATACTGT CTACAATGTT AGAGGTATT      240
GAAAAGTGAT AGTTTATTTT TTGGAATTAT TTAGCATTAT TAAAAACAAG GGGGAGCACA      300
CGGTGGCACC TTTCTGGTCC CAGCTACTTG GGAAGCTGAG GTAGTAGGAT CGCTTGAGAT      360
CCGCTCGAG                                         369

```

(2) INFORMATION FOR SEQ ID NO:1200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

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GAATTCGGCC TTCATGGCCT AGACAGGTTG CTAGCTACAT GGTCTCTGA AGAAGAGTTT      60

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TCCAGCAGAA GGAGCAACTA GTGCAAAGCC CCTGAGACAC AACTGCACCT ATCCAGATTA 120
AGGACCACGG AGGAAGCCAC TGTAGGAGCA CAAAAAAGT AGGAGATGAA CAGAGAGGTG 180
AGGGAGGCTC CGTAGGTCCT AGTATGCACT TTGGCATTTA TTTACTGATT GAGATGGCAG 240
GTCATTGGAG GATTTCGGAGC AGAGGAAGGA TATAATCTGA CATTTTAGCA GGATCCCTTT 300
GAGTAAGTTA GCTGCGTAGA CCTAAGATGA ACAAGGACAG CCACAGCAAG ACCTGTAAGG 360
AGACTATCCT TGTAAATCCAG GCAAGAGATG ATGGCAGCTT GGACCAGGGT AGTAGCAGTG 420
GAATTGATGA GAAATGGTTG AAATCTGGAT ATATTTTGAA GATGGAGCCC ATGGGGTCTC 480
GAG

```

(2) INFORMATION FOR SEQ ID NO:1201:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 192 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

```

ACCATATAAT TTGCCACTTG AAGTGACAA ATTCACTGAC TTTTAGTAAA TTCACAGTTA 60
TATATTCATT AGGATATTCA GAGTTATATA TTCATCACCA CAGTCACTCT TAGAACATTT 120
TAATAACCTC AAAAAGAAAC CATGCACTCC TTAGCCATCA CTCCTAACCC AACTCTCCCT 180
CTACCGCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1202:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

```

GAATTCGGCC TTCATGGCCT ACTTTAAACA TGTGGTCTTA CTGCCTGCAA ACACATACAG 60
ACTCTTAATT TTTATTTACA TAGATGTAAA TATACACATA TATTACTCTA AAGATAAACC 120
TTAAGGGTAA GAAAATTATA AAGTATGTGT GTTNTGTGA ATATGAATTT GTACCTATAT 180
TCAGAAGAAA AGAGCAATAT TGGCACAAA CAAATCATCT TAATAAGGTA ACTAATTGGN 240
TGNGTGCAGT GGCTCACGCC TGTAATCGCA TCACACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:1203:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

```

GAATTCGGCC TTCATGGCCT AGTGATCTAC TTAGGTAGCT CCTGGAAAGC AAAGGAGAGA 60
GAGCAAGACC TGTACAGACT TTGTTTATGA GGAAAGCTAT ATAAGGATTA TAAGAACTGA 120
TAAATATTTT TTTGTTTCCT TTTTGACAAA ATGGATTTTC TTCAGTTTCT TAAGCAGATG 180

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TATTATTTCT GGGACGTTTT AGCCATGTAG TTTCTTTTAA TTCCTCTTTG ATACCCTGAA	240
TAACTAGCCT TAGAAACACA AGTAAAGCTC CCAAAATTTT ATTTTCTACA TATTTTATTA	300
CCAGATTGAA TTCTAGACCT GCCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCC TTCATGGCCT AGGTCCTAAA AAGAGTAAAA GGTGAAAACA CTAAGTGATA	60
TTCNAAACAA AAGAAAAAGA TGAAAAATAA GAACCTTGGT TAAAGAGCAG TCGAAATAAG	120
TAATGATTAT AGCTATGATT TATATAGCAC TTNTTACAAG AAGCCAGGCG CTGTTTTTAA	180
CACTTGACAT ACTTATTTGC TCATTTTATA ATTGTAACAA CCCTATCAGA TAGGTACTAT	240
TTTTATCCCA CTTTACAGAG GAGAACTGA GGCACAGAAT TTTAAGTGAT TTGGCCGGGT	300
GCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:1205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

GAATTCGGCC TTCATGGCCT AAAAAAAAAAT GTAGTCTAGA AAGAGACTAG GAATAGAACA	60
CTGCTGACTT GTTCTTATAC CAAGAGCTGG AGGCATAAAC AGTTTTAATA AAAAAGAATA	120
CTTTGTATCT TTGTATGTAA CTTCCCTTGA GAGATTCTGT TTCCCCTGTC TTAAATTGTC	180
AGGCTATTTT TGATTGCTGT TTAAATAAAT GGTAGTTACT ATTTGAGTCA NGCTTCTTAA	240
AAAAAAAAAG ATATAAAAT TCGCCAGCTC AGCTTTCATT TAATTAGTAT CAAAGAAATG	300
ATATCTGTGG CAGTGAACAT TAGTAGCTTG TTCCAGGGTT TATTGTAGGT TTGTTCAAGT	360
CAGTACTGCC CATCTTGCA CTTAGGTTCT TGAATACAG AGGTGGATAA GGTTCGCCCC	420
TCGAG	425

(2) INFORMATION FOR SEQ ID NO:1206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

GAATTCGGCC TTCATGGCCT AAGACCAGCA CCATCGTGAG CAAGATTCCT GCTGCGTGTC	60
TTCCAAAATG GAAAAGCATC ACAACTAAAT ACCTAATATC CTACCAAACA AACCACAGTC	120
CCTACGTAGC CCTACTTCAG TCCCAGGAGA AGGAATCCAT GAATGGGCTG AGGTTCCGAG	180

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GGTAGGTTGT GGATGTCTTT CTCTAGAGGG GTCCACACC TGGAAAAGAG GACACCCAGC      240
CCGNGGGATG AGGGAAGCTG GGCAAGGGAG AAAGTTGTTG AGTCACACTG GGGACCCCAG      300
ATGTAGTGAG CTCAGCAAGA AAAGCCAGGT CCAGAGAGAG TCGCACAGAA TTCCTGACTC      360
ACAGCGCCCC TCGGTCCACA GTGGAGAGGA GGAGGAGGAG GAGCAGAAGG AGGGGGAGGA      420
GCTGCAGGAG GAGGAGGATT TGAAAGCGCT TTGGCCTTGT GTTATGTTTT GCTTCTTTTC      480
TGTGCCCCCC TCTAGGCCAT GAAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:1207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAAATTTTTC AGTAACTCAG TGTCTTTAAC TAATAATTTA ATCATTCTAG TAAGAAAACA      60
TGCTTTGTAT GATTTTAGTC TTTACATTTA TTAATTTATG TAAATTAATA TGTGGGTTTT      120
ATGATCACCC ACGACATTGT CCTAACTTGT CGACTGTTCT GTGTGCTCTT TTAAAGAAGG      180
TAGTCTGTTG GCCGGGTGCG GTGGCTTACG CCTATAATCC CAGCACTTCG GACAGGCTCG      240
AG                                         242

```

(2) INFORMATION FOR SEQ ID NO:1208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

```

GTAGAATTGT ACAGTGCTTA TGAGTTATGC ATGTGTTCTT GGTCTTTGTT CTAGGATTTT      60
TTTTTTTTTT TGATTGCTGC TCCAGTTGCC TTACTTACTT TGACATTGGA GTTGACCACA      120
TGATGGTGTT CCACACTTCC CCTAGGCTCG AG                                         152

```

(2) INFORMATION FOR SEQ ID NO:1209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

```

GAATTCGGCC TTCATGGCCT ACTACCCCTT TATCATTCAC TAACGTGAAT GTGGTGCTAA      60
TTTTTCCAGT CCATATCTTT GAACTTTTTG TAATATATGC ACATCAATAA GCAATCGAGT      120
TTTATCTATT CTAATTGTTT TAATGTACAA CTTTATGGGT ACATGTGCAA TTTTGTCTTCT      180
TGCATGGTGG CCAAATCAGG GCTTTTAGAA CATCCAACAT GCGAATAATG TACATTGTAC      240
CCATTAACTA ATTTCTCAAT ACTTCTGAGT CTTCTTGTGC TATGATTCCA CTCTCTACAT      300
CACATGTACA CCTCGAG                                         317

```

(2) INFORMATION FOR SEQ ID NO:1210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

```

GACAGATTTC ATTACCTTGA AGTTCCTGTC ACTGAACAAT TCTCACTCTG GATGTATTCC      60
TGCTCTAGGA TGTGAATTTA GACTTTTGTA ATAGAGTGGG CTTTGAGAAA TAGCTTTTCT      120
GCTCATTTTA GTTTCATGAT GACTGCATGG AATGTTTTGC TTCACGCTTA TGCATTGAGT      180
TTTATCAAGC ATTAAGCAGT TGGCCGAAAC AGGTAATACT TGAACATTCA GTCCAAGAAA      240
AACAAAATGG ATTGAACAT ACGTAGAATC AGTAAACTCG AG                          282

```

(2) INFORMATION FOR SEQ ID NO:1211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```

GAATTCGGCC TTCATGGCCT AGTCAAACCC TAGAGCAATG CAGGCCTTGT TACAGATTCA      60
GCAGGGTTTA CAGACATTAG CAACGGAAGC CCCGGGCCTC ATCCCAGGGT TTA CTCTCTGG      120
CTTGGGGGCA TTAGGAAGCA CTGGAGGCTC TTCGGGAACT AATGGATCTA ACGCCACACC      180
TAGTGAAAAC ACAAGTCCCA CAGCAGGAAC CACTGAACCT GGACATCAGC AGTTTATTCA      240
GCAGATGCTT CAGGCTCTTG CTGGAGTAAA TCCTCAGCTA CAGAATCCAG AAGTCAGATT      300
TCAGCAACAA CTGGAACAAC TCAGTGCAAT GGGATTTTGG AACCGTGAAG CAAACTTGCA      360
AGCTCTAATA GCAACAGGAG GTGATATCAA TGCAGCTATT GAAAGGTTAC TGGGCTCCCA      420
GCCATCATAG CAGCATTCTT GTATCTTGAA AAAATGTAAT TTATTTTGA TAACGGCTCG      480
AG

```

(2) INFORMATION FOR SEQ ID NO:1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

```

GAATTCGGCC TTCATGGCCT AGGGTGATAT TTAACCTGTT GCCAATGGCT AAGCTCCAGA      60
CTTTGCCTCT CACACTTGGA GGGATTCCTT GCCACCATAA ATCTCGAACT TTTCTAGAGC      120
ACCACATTGT TTCCAGTTA GGTAAGATCT CATTATTCCA GGTGAGCACA GCGTTTCCAA      180
TGCTTTCCTC GACTCTGCAT CTTTCTTCCA GCTGCTTCTT CCTTCGCTGG GCTTCTTTCA      240
GCTCTCGCTT TTGGCCTGA ACCACCATTT CTTCATACTG CTGTCTGTGC TTCTGAGCTT      300
CTTCAGCTGG TTTGCTGGG AGATTGCTG GTCTGTCCTC GAG                          343

```

(2) INFORMATION FOR SEQ ID NO:1213:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

GAATTCGGCC	TTCATGGCCT	AGAGAACTA	AAACTCAGAG	AAGTTAATTA	CTGAACTCAA	60
GATCCCAAAG	TGCTGGGATT	GCAGGCGTGA	GCCACCGCGC	CTGGCTGAAA	GAGCTTTTTT	120
AATGTATTAT	TTATTGTGT	CAGGATAGAC	TCATTGATGC	GTGTTTATT	CAGTGGGTTA	180
TAATTCTTTA	TTATGTATTC	TGATGTTGGT	GTTTTCCAG	TTTTAGCCAA	TGGCATCCCC	240
TTCCATCTGG	ATCCTGTGTT	CTTTTGACAT	GGCTCCAATC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1214:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

GAATTCGGCC	TTCATGGCCT	AGAACCAGGC	CTTCCAGTAC	GAGTTTGGAG	CCATGTATGC	60
ATGGATGCTG	TGTGTCTTCA	CTGTCATCGT	GGCCTACAGC	ATCACTTGTC	CCATCATCGC	120
GCCATTTGGC	CTCATCTACA	TCCTGCTCAA	GCACATGGTG	GACCGGCACA	ACCTCTACTT	180
CGTCTACCTC	CCAGCCAAGC	TGGAGAAGGG	GATCCACITT	GCCGCTGTGA	ACCAGGCCTT	240
GGCAGCCCCC	ATCCTGTGCC	TCTTCTGGCT	CTACTTCTTT	TCCTTCCTGC	GCCTGGGTAT	300
GAAGGCCCCC	GTCACCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:1215:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 446 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

GAATTCGGCC	TTCATTTTGA	AAGATATTTT	TGTAAAAATC	TGTTTGTTTT	CTTTTAATAC	60
TTTCCAGTGT	TATCTGGGTT	TCTTAATTTC	TGACTTAAGG	TCTGTAATAA	TTTCTGCTTT	120
CATTCCTCTT	AATATATTGT	GTCTTCTTTT	GTCTACATTT	AAGATTTTAT	CTTTATCACG	180
TGTTTTGAAA	AGTTTATTTT	TGATGTGCTC	TTTATGTTTT	TCTTTATTTG	TAGTGCTTGG	240
ACCTTGTTGGT	GCTTTCTTTA	TTTATAATTT	TCATCAAATT	TGGGGGGTTT	GACCATTATT	300
GCTTCAAAAA	TAATCTCTGT	TCTCTTCTTT	CACTTTCTCC	AGTTACATAC	TGTAGAGTAA	360
ATGATAGCTA	CCGAAGACAG	AGTGATCCGT	GATAAATATC	ATTAATGCCT	CTGAAGAGGA	420
GAATGACTCC	AGTGAACCA	CTCGAG				446

(2) INFORMATION FOR SEQ ID NO:1216:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

```

GGACTTTTGT GAGAAGCAGT ACTATTTCATT AATTAAGTAT AGAGTGTCTT GTTAATCCTA      60
AAAGAAAGAG AGCCTTAATG AGGATCATGA ATTTTTTTTT TTTTGGGATG      120
GAGTTTCGCT CTTGTGCGCT AGGCTGGAGT GGGGTGCTAT CTCTGCTCAC CACAACCTCA      180
GCTTCCTGGG TTCAAGCGAT TCTCCTGCCT CTGTCTCCCG AGTAGCTGGG ATTACAGACA      240
TACGCCGCCA TGCCCAACTC GAG                                           263
  
```

(2) INFORMATION FOR SEQ ID NO:1217:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```

GAATTCGGCC TTCATGGCCT AAACAACAAC AATAACAACA ACAAAAACAT GTATAACTGG      60
GAAAAAAGTG AAAGAGAATG CAGGATCATA AAAATATAGC AAACAAAGTG AGTGGGATTT      120
AAAATTAGTG GAATAAGAAA TAATGGGTAA CAATGAAGAA CATAATTTAG GTAATAGTAT      180
AGTATCTTGG GAGCCCTCCT GGAAGTATCT AGTTATGGAC AGTGAGCAGC AGAAACAGGA      240
TGTAAGTCAA TTCAGCATAC TTGATGGTTG TGTAACCCCT AGAAAATGAC TCCAGGAAAT      300
AGGTGAGAAT CCAATCTATC TCGAG                                           325
  
```

(2) INFORMATION FOR SEQ ID NO:1218:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 293 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```

GAATTCGGCC TTCATGGCCT ACAGAGATAG GGTCCCATCC AGGTTCTTAA CTGGGTGGCA      60
CATGCATGGG CTAGATCCAA ATAGCATTGC AAAGGCCTGG AAAACAGAAC TAGAATTGAA      120
ACCACCGCGG AAGACTCATT CGAAGTCGTG GGCTGAACTC AACCAGGTCA ATGCTTCAGA      180
AAAATACCAG CATTCTCCAC AGGACATAAA CAAGATTGTC TCATAACATA CCATTCAAAA      240
TATTAGGATA CAATCCAAAA TTGCTCATCA TAAGAAGACA GGAAAACTC GAG                                           293
  
```

(2) INFORMATION FOR SEQ ID NO:1219:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

GAATTCGGCC	TTCATGGCCT	ACGAGGATTG	GGGTAGGTAT	GNGCTTTNGG	CTCATGTTTG	60
TGATGATAAC	TGAAGTCTNT	TGTGGGTCCG	ACCTGTTGTA	GGGTGTGGGG	GAAAGTGAAG	120
GAAGAGAATG	AAGGTGAGTC	CCCGCCGTG	CAAACCTTCA	CCAAACCACG	CGGCCAGTT	180
TTCGTGAGTA	CCCCTGTGTC	CCAGAGAGGA	GGACCCAGCG	TCCTCGGCTC	TGCCGCAGGC	240
CTTCTTGGTC	TGGTGGGTAC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

GAATTCGGCC	TTCATGGCCT	AAGGAATTGA	AACCCAGTAC	TTGCAGAAC	TTCTTATGAC	60
TTCTGGAGTG	GTCCTCTGTG	AAGGGGTCAA	ATGGTTGTCA	TTTCATAGCG	GTTACGACTT	120
TGGCTACTTA	ATCAAAATCC	TAACCAATC	TAACCTGCCT	GAAGAAGAAC	TTGACTTCTT	180
TGAGATCCTT	CGATTGTTTT	TTCTGTTCAT	TTATGATGTG	AAGTACCTCA	TGAAGAGCTG	240
CAAAAATCTC	AAAGGGGGAT	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

GAATTCGGCC	TTCATGGCCT	AGCTCATTCT	GCTGGGGGTA	GAGATGAGGG	GAGGGAGTAA	60
GTAAACCTT	GACTAGCAA	GTAAGAAGCT	GGGGGGATGC	GTGTGCCTCA	GTTTCCTCCT	120
CCACAACCTGA	ATATAGTGGC	TGAAACTGG	GGAGATACTT	GATGGCGCGA	ATGTCCGTTT	180
TCTCTCCCTT	CCCACCTCCT	GCAGGAAGCA	GGACGGGGCA	GGCAGCACCT	GGTAGGCACA	240
GTGCTTTGCC	CCTCCTCCCC	TTCCCTTCTG	GAAGTCTTGG	GGCCTCAGTG	CTTGCAACAG	300
CCACTCCTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GCGATTGAAT TCTAGACCTG CTGGCCTCAA GTGAACCTCC CGCCTCGGCC TCCCAACGTG      60
CTGGTATTAC GGGCATGAGT CATTGTGCCC AGTCACAGAA TTCATTTTAT TTGTGAAAAT      120
ACAGTGGGTAC AAGTAGGCCT TTGTAAATG ACTAACCTGA AACCTCTTGT GAATGACAAA      180
CTCCTCTCTA CTCCAAATAC TGGCCCATCC CTGCTTAAAT ACTGCTCAAT GAAGTTACTC      240
ATGCTAGTTC TTGAGGGAGT AACTCTAGAA TGATTCCATC TAGGAAGACA TAAGATAAAA      300
TGGTAAGTAT TCTAAGTTCT ATAGGTAGTT TAGTCATGCC ATATTATAAA CCTCCACTCC      360
AAAAATAGTG TGAGGTCATT TCTGGCCAGA GTGAAATAAA AAATGTATAA TGCCTGAACA      420
GTCTATTATT CTGACAATGA AAAAGATTAA TGCAGTCCCC TTTATCACTT GCATGAGTAA      480
AAAAATATAT ATATATATTG GCTGGGCTCG AG                                     512

```

(2) INFORMATION FOR SEQ ID NO:1223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

```

GGGTGTTTCA TACAAAGAAT ACAAGTAACT GATGAATGAA GGGGGCATCT TGTGTCCCCA      60
CAATCCTGCT GTGCGCACAC CACAGGTGAG CCGTTC TGCC TAAGGGAACA GCCCGGGCCC      120
CTCCCTCCGG CTCCTCCCCA GCACCGTCTC CTCCACCCAG TGGCCTGGCC GTGGATGCTG      180
CCTGTGGCCC AGCTTTGAGA CACCGCCCTG ACACGTGTCC AGCCTTACGT GGAAGGATTT      240
GTCTGTTTTG TGGCATCCTA GTAGATGCCA CGTTAGTAGA TGCCATGTTA GTAGAAGGGA      300
TGTGGGCATT TCTTTGTAAG TTCCCAAAG CCTATGAGGG TTTTTCAC GATTCCGTTT      360
CCAGTTTGGC TTTTGTGTT GTTGTGGCTG TTCTGGCCCC CCCTGGGCCC TGCAGTGGAG      420
TGGGGGGCTG CACCTGGGAG CCTCGAG                                     447

```

(2) INFORMATION FOR SEQ ID NO:1224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

```

GAATTCGGCC TTCATGGCCT ACTTTGTTTT ATATAATAAA GTATGCCTGT TATATTAAAT      60
AATAAGAATA TGGCAATTAG CGATATAGCA TACCCAAACA AAGATGTTCT CGATACAGTC      120
TGGCAAAGAC TATCCCAAGG TTATTTTAAT GAATTCAGAC ATTTTTCCT GTGGATATTT      180
CTCCATCCTA AAAAAAGTGG CAACCAAGGA AAATATTTAG ATGCAAATAC TCGAG          235

```

(2) INFORMATION FOR SEQ ID NO:1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

GCGATTGAAT TCTAGACCTG CCTCGAGACT GACGCCGCAC CATGACCCTC CTGCTGCTGC	60
CCCTTCTGCT GGCCTCTCTG CTCGCGTCCT GCTCCTGTAA CAAAGCCAAC AAGCACAAGC	120
CACCGCATCT CGAG	134

(2) INFORMATION FOR SEQ ID NO:1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

GAATTCGGCC TTCATGECCT ACACACATCT GGTAAGCAGA AGCACGGAAG GCCTTTGTTT	60
CAGACAATCT TTTAAATGAT GTTTGTATAG GGAACAGCTT TGAAGATAA AGAATGTCTC	120
TCTCTCTTAT GGTTTGAATG TGTCTCCAAC ACTTTATGTG TTGAGACTTC ATCCCCAGTG	180
TAACAGTATT GGAAGTGGA GCCTTTAAGA GCTAATTAGG TCATGAGGAC AGCTCGTCA	240
TGAGTTGACT AAAGCTGATA ATGTGGGAAC GTGTTGGTTA TCACAGGAGT GAGTTCCTGA	300
TAAAAAGAAT GAGTTGGCC AGATTGTCTC TGTCTGTCTC ATCTGCCTGC TTCCACCTTC	360
TGTACTTCCA CCTGGAATGA CCCTCACCAG ATGCTGGTGC CATGCTCTTG GACTTCCCAG	420
CATCCAGAAC TTCTGTTTT ATAAATTACC CAGTCTATGG CATTCTGTGA TAGCAGCAGA	480
AAATGGACAG AGACACCCTC AAATTAAAGG ACAGTCTTGC TGAATATGAA TTAGAAAATA	540
TCTGGGTTAG CTCGAG	556

(2) INFORMATION FOR SEQ ID NO:1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AAATACTACC GTATGGCCCA CCATAATTAC	60
CCCCATACTC CTTACACTAT TCCTCATCAC CCAACTAAAA ATATTAAACA CAACTACCA	120
CCTACTTCCC TCACCAAAGC CCATAAAAAT AAAAAATTAT AACAAACCAC TCGAG	175

(2) INFORMATION FOR SEQ ID NO:1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

GAATTCGGCC TTCATGGCCT ACTGTTTCCT TGCCCTTTTC ACCGTCTGGT GGTTCCTGC	60
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```

AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC      120
TGTCATCACA TCGCCTTCTC TTGAGAAAGA TCCCAGGCTG GTATTTAAAT TGCCTGTGG      180
CAGGAACTTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG      220

```

(2) INFORMATION FOR SEQ ID NO:1229:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 526 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

```

GAATTCGGCC TTCATGGCCT AAGTCTCTTG ACATCTCAAT TTACCCGAGA ACATCTCTAT      60
TTAATTATTC CCTGAGGAGG GGAAGTTGGG TATGGCGGTT GGAGGTGGAC AGGCTCCTAA      120
CAAGCACTTG CCAGCAGGGG GCACTCCAG TTTTCGCTCC GCTGAGTCAC CCAACCCCTG      180
AGGCTTCGCC ACTTTCTAAT GTTGCTGTG GCTACATGG TCAGACCCAC AGGCAAAAAA      240
GTCGAAGTCC CTGGAGTCCC TGACCCCTCT TCCTCTCTAT AACGATTGGA AACTGTCCAA      300
ACCAACTCCA GTAGTTCTGG GCTGATGAAT CATCCTCTTG TGGGGCGGAG AGTGGGGGTA      360
GGGTGGAGCA ATGTGGGCTA GGACCCAGGG CAGGATCAAA ATCTCTGAAG ATGCAGAGCT      420
CCCTCTGCCC TGGGAAGAAG GAAGCAGGAT TTATTATAAC ATTAGTCTCA CTGTCCAATC      480
GACTAAACA AGCTCTCCA GGGCTCGGSC CAACTGTCGA CTCGAG      526

```

(2) INFORMATION FOR SEQ ID NO:1230:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 312 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

```

GAATTCGGCC TTCATGGCCT ACCATTGGGC TATGACCTGA GGAGAATCAA GGTAGCTTTC      60
TCAGGCCTCG TGGACATCGT GGATATAAGG AATGCTCTCG TAGGAGGGTA CAAGAACCCC      120
AGCATGATTC CAATAGAGAA GGCCAGGGG CCCATCCTGC TCATNGTTGG TCAGGATGAC      180
CATAACTGGA GAAGTGAGTT GTATGCCCAA ACAGTCTCTG AACGGTTACA GGCCCATGGA      240
AAGGAAAAAC CCCAGATCAT CTGTTACCCT GGGACTGGGC ATTACATCGA GCCTCCTTAC      300
TTCCCCCTCG AG      312

```

(2) INFORMATION FOR SEQ ID NO:1231:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

```

GAATTCGGCC TTCATGGCCT AGCTTTATCC ACTCTGGAAT CCTGGAGGAG CCGCTACAAC      60
CAAGTTGTAA AAGAAAAGGG AGACCTTGAG NTGGAAATTA TTGTCCTGAA TGACCGGGTA      120

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ACAGATCTTG TAAACCAACA ACAAACCCTG GAGGAGAAGA TCGGGAAGA CCGGGATAGC	180
CTGGTGGAGA GACTACACCG TCAGACTGCT GAGTATTCCG CATTCAAGCT GGAGAATGAG	240
AGGCTGAAGG CCAGCTTTGC TCCAATGGAG GACAACTCA ACCAGGCACA CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1232:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 360 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

GAATTCGGCC TTCATGGCCT ACGCAGCTCT ACCTGCTCCA GGGGCACCTG GACCTGTGTG	60
AGCAGCACTG TGCCATCCTC CTGCAGACTG AGCAGAACCA TGAGACCGCT TCTGTGAAGT	120
GGAAAACTTG AAGACATTCC TGCCTTCTTT GAATTGGCCA AGAAGGTGTC TAGCCGGGTG	180
CCTTTGGAAC CAGGGTTCAA TTACTGCAGA GGTATCTACT GCTGGCACAT AGGGCGCC	240
AACGAAGCCT TAAAGTTCCT GAACAAGGCA CGCAAGGACA GCACTTGGGG CCAGAGCGCC	300
ATCTACCACA TGGTGCAGAT CTGTCTGAAT CCAGACAACG AGGTTATGGT GCGGCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:1233:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 423 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

GAATTCGGCC TTCATGGCCT AGAAGGACTG AAATGATGTT ATACTAAGGG CTACTGAACT	60
TTTTGCCTGT TCTTTCCAGG TGTGACAGCC TTTTCTTTTC TTTCCAGGTG GTTCGCTTTG	120
AGGTGGTCTG AAGCCAAGGC CTCGCGGAGC TTCTTTGTGT GTCACCTTGC TTCCACGTTT	180
CAGTTCTTGT TTGTTTCTA CTGCTTTAGT TTTTTTTAAA GTTCTCCAGT GTCCCCAAGA	240
GGTATTAGAA TCTTGCTGTA CCAAGCAAG ACGTTAATTT TTCTTTTAAC TGTTTTGGGG	300
AGGGAGGGAG TGATAGCTTA ACTGCTGAAG CCAGGCGGGG GTCTGCTGGA GGATCCAAC	360
AGAGAGTATT TCCTCCACTG TACAATGTCA CAGACTATCT CTATCATCAT TGCTTTGTGG	420
CAT	423

(2) INFORMATION FOR SEQ ID NO:1234:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 475 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

GAATTCGGCC TTCATGGCCT AGCATGTAAA ACTTCAGTCC TGAACATTTA TAGGGTTTAA	60
TAGAAGGGCA TCCTCCAGGG CTGGTCCATT CAGAGAAATG CTGCATGCTG CCGTCATGGA	120
ATGTGGCCCA CAGGACACCA GAGCCGTGAG AACCGGAGAG CAGACTTCCC TCACGGCTGG	180

GCTGAGCAAA	CCCTCCAAAG	CCCTCCTCAC	GCAGTTACTA	ACAATAGCAT	GGGCTTACAG	240
CACAAGCACG	TGTTCTCACC	TTTTTCCTAT	GCCCTGGACT	AAGGTTTGGC	CAGTGTAATC	300
ATATAAGGCC	ATCCTGACAT	TGTTTCTGTG	TTTCAAAATT	TGGATTTTTA	TTTACATTAG	360
AACCTACATTG	CTCCTAGTAG	AACATTACCT	TTAGGGGACT	AATTTTCCAT	GGAGAACTAT	420
TTCAGCATAT	TGCATGCTGC	TCAGACCCCA	AGTCAGATAT	GCCCACAAGC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:1235:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

GTTTTGAGCC	TAGTAGCACT	ACCTTCCAAG	TGAGTCACAA	CAAATTTGAT	CCTATTGGT	60
ATGTTTTTGT	CCACTGTTAT	GATTNATCAT	GTATCTTACA	AGAGCCACTC	AAGCAAGACT	120
CTGCTTCTAT	GTATGGTGAG	GCCTNGTTGT	TCTAGGCTAG	AATAAACTCT	TTGTATGCCT	180
CATTGAATAT	GCCAGGTAAA	ATTTATGCAG	TCAAGAAATGA	ATTATTTTTC	TGACTAAAGT	240
GTGTAGCAGT	AGTTCAAAAT	TGTGCCCTTG	TTTTAACAGT	TTCTGTCNAC	ACCTTCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:1236:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

GAATTCGGCC	TTCATGGCCT	AAGAGAAGAT	AACATTTACA	AGTAAACAGT	AAGTGCAATT	60
GTATTTTAAAT	TTCTTGGTCT	CCGAAAACCTC	AGCTGTGACT	GCTTCCATT	AACAGTTCCA	120
GCTCTATGTG	TTTCTCTAA	CGCTAAAGGC	ACAGCCCCCG	GGAATCTACT	GCTTCCTAAG	180
AGTCTCCATG	GAGTCTATTT	TACAACCTCC	TTTCCCTCCA	TGCTTCCGCG	GAGGAGTCTA	240
TACTATCTCT	ATATACACAT	TTTAAACATT	ATTCTTCATT	TGAAATTCCT	TCAATAAAAA	300
CACAGTCACC	ATTCTTCATC	TTCTTGGGAA	ATGGCCTGCT	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1237:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

GAATTCGGCC	TTCATGGCCT	ACTCACTATG	TTGCTCAGGC	GGATGTGGAA	CTCCTGGGCT	60
CAAGCGATTG	TCCTGCCTTG	GCCCCCAAAG	TGCTGGGATT	ACAGGTGTGA	GTCAATGGCAG	120
CCACGGCTCC	AGAGCTCGGG	TTCTTAATCT	GGTCTGTGGA	TGGCCCCCTGG	GGGCGGTCCC	180

ATGAGCCCCT	CACAATTGGA	CACAGTTTTG	CAAAGGGGTA	AAAGGACAAG	AATCGGTAGC	240
TGTGACTGTG	GATGAGCCTC	TGAGCTTCAC	TTTCCCTCCC	TGAAAGGGGG	TGACAGTGGC	300
ACCTCCCTGG	AGGTTTTCGT	GGAGGGGAGG	AAACACATGT	AAAATACTTC	ACCCC	355

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

GAATTCGGCC	AAAGAGGCCT	ACTAGACCTG	ATCACCACGT	TCAAAAGTTG	GCTTTCTCCA	60
TTTAAAGTTC	TTCCTTAAAG	CCTCTTAAAG	CAAAGTCCCT	GAAATGATAC	AGTAGAAAAA	120
TCACACAGAC	TTATTTAAAA	TGAATTCTAT	CACTATTCCCT	GAGATCTCGC	CTGCCCCACT	180
GAGGACATTT	TGTTTTTCGA	AAGTGCTTTG	AAATGTGATA	AAGGATCTTA	AAGAATATTT	240
GTAAAATTAT	GCCCAAAGAA	GACATTCTTT	GAGGTAACT	TGCAGTGTCT	AAAAGTCAAG	300
AATGAGGAAG	GAAAGGAAAA	TAACAGATTG	ACTTTAAAAAT	GGACCACGCT	AATTGGGCAG	360
TGAAACATCC	TTGTGTCACA	CCATTTACCG	TAGCAGACCA	GAAGAGGGAA	AAGGCTTGAT	420
TTTTCTCTCA	TAGATACCAC	AGTTCACCTCT	CAAAAACATT	CCTAAAATGG	ATTGATATTT	480
CTCTGATAGA	GCACCTGTTT	TGCTACTGAC	AGTGTTAAGT	TCCATACTAA	TCAGCTCATC	540
TAGCCTAACG	ACAACTCGAG					560

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 569 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGNC	AAAGAGGCCT	AAGGAGAANG	AGGCTCAGAA	GGAGACGATT	AAGGATCTTC	60
CCAAGATGAA	CCAGGAGCAG	TTCATTGAGC	TGTGCAAGAC	GCTTTACAAC	ATGTTTCAGTG	120
ANGACCCCAT	GGAGCAGGAC	CTGTACCACG	CCATCGCCAC	CGTGGCCAGC	CTCCTGCTCC	180
GCATCGGAGA	GGTGGGGAAG	AAGTTCTCAG	CCCGCACAGG	CAGGAAGCCC	AGGGACTGTG	240
CCACTGAGGA	GGACGAGCCA	CCAGCACCCG	AACTGCATCA	GGACGCAGCC	AGGGAGCTTC	300
AGCCCCCAGC	TGCAGGAGAC	CCCCAAGCCA	AAGCAGGCGG	AGACACACAC	CTCGGAACAG	360
CCCCACAGGA	GAGCCAGGTG	GTGGTGGAGG	GGGGCAGCGG	CGAGGGACAG	GGCTCACCTT	420
CCCAGCTGCT	GTCTGACGAT	GAAACCAAAG	ACGACATGTC	CATGTCCTCC	TACTCGGTGG	480
TCAGCACGGG	CTCCCTGCAA	TGTGAAGACC	TTGCAGACGA	CACGGTGCTG	GTGGGCGGGG	540
AGGCCTGCAG	CCCCACAGCG	CGACTCGAG				569

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

GAATTCGGCC	AAAGAGGCCT	AGAGACCAGC	CTGGCCAATA	CGGTGAAACC	CTGTCGCTAC	60
TAAAAATACA	AAAATTAGCC	AGGCATGGTG	GCTCACACCT	GCAGTCCTAG	CTACTTGGGA	120
GGGTGAGGCA	GGAGAATCAC	TGAAGCTTGG	GAGGCAGAGG	TTGCAGTGAG	CCAAGATTCC	180
ACCGCTTCCC	TCCAGCCTGG	ATGACAGAGT	GAGACTCCGT	CTCAAAAAAA	CAAAAAAA	240
GTTACTTCAA	TAATGTACTT	TTTTTTTCA	AATTACAGAT	AATCTATAAG	GAATTAATCT	300
TGAAATTAAT	TCCAGGTTTA	ATTGTTAATG	AAATTCACA	AGCCTAATT	AACACTTGTC	360
TGGATAACTC	ATTTTGATAC	TGAGTAAATA	GTCAACGGTC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

GAATTCGGCC	AAAGAGGCCT	AGGGCTTTTG	TGAATAAATT	TTAAAAGAGA	CTACTGCCTG	60
TCCTTAAATT	CCTTTTCTT	TTTATAAAAA	AAGAACTATT	AAAAATGATT	GACAAATTTT	120
GAGTTAAAAA	ATTGTTAAAA	CATTCTCTAT	ATTTAATTC	AATTTTATAA	TAGATTACAG	180
GAAGATGCTT	ATGAAACAAA	TACATTTGTT	TCAGTACATG	TCTTTAAATG	ATAGACTTAT	240
AAGTATGTAA	ACAACATAT	AATAAAAGGT	TTCCAAACGC	TGCCTGTAAG	AAATCAGGCA	300
AATTTTACCA	TAAGCAATAA	ACCATTCCAA	GCCTTCCAGA	CAGTCTCCAT	AGCCGCACCA	360
GCATGGCAAT	AAGCTTTAAC	CAAACGAAAA	CAAACAAACA	AAAGCACTTC	GCAATTTGTT	420
GCTGCAAAAC	AGGGAGAGAA	AAGAGTGTAC	AAACTTGATG	GAATCACAAC	AGTCAATATA	480
ATTTAAGGGA	CAATAAAGTC	AATAAGGTTG	ATGGTGTTTA	TTGTTTAAAA	AGTTAGGCCT	540
CT						542

(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

GAATTCGGCC	AAAGAGGCCT	ACTGATACAA	TTGTTGACTT	TTCTTTTACT	ATGTGTAAGA	60
AATACCCCAA	ACATGAAAAG	ATTGTTTGA	TCATATGCAT	GTATGTAGAA	TATTTTGC	120
GAGCAGAAAG	ATTATGTTAG	AAGTGTGATT	TTTATTTTCA	GAAGTCATAT	ACATGTAAGC	180
TACAATTTTG	AGTGCTTTAT	AAACACTTAA	GATATATATA	TAAATTTTAA	TTTTCATAGCA	240
ACTTGTAATA	AATAAAATAC	TGTTGAAAA	GCCTTTTTC	ACATATCCCT	AAGCTAAGGG	300
AAGAGGAAGG	AATAACAAC	CAGTGAAAAG	ATGGTCTCCA	GTTTCTGAAT	GAAAAAGCTA	360
CAACCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

GAATTCGGCC	AAAGAGGCCT	AGCCTCATCA	CGGGCAGGGC	TCTGGCCCAT	AGTGGCTGGA	60
CAGACACTGG	CACAGTCTTG	CTGGTCTGCT	GGGAGCACAC	AGACATTGGC	ACAGACTTGC	120
TGGTCTCTTG	GAAGAGGGCA	AGACCCAAA	CCAGAGCAAA	ATACACTTCC	AGCTCTTAAC	180
CAGGCTCCTT	CCAGTCACAA	GTGTGCAGAA	TCAGAACAGA	AGTAGTACCA	ATCAATGTCA	240
CATGAACAAA	CAAGCTGCCC	CCAGGGTACC	ATTTGGGGAG	GGGAAATCTT	TTCTTTCTTT	300
CCCCCTTAAA	AAAAAACACA	TCTGCCCCGA	ACACTTTCCC	ACTGTTATTC	TTCTCTCATA	360
CCCCAACGCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:1244:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 468 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

GAATTCGGCC	AAAGAGGCCT	ACACACCAAA	CTGATTATCC	ACCAGACACT	CAGCGTCTTA	60
GAAGATATTG	TGGAGAATAT	CTCGGGGGAG	TCCACCAAGT	CTCGACAGAT	TTGCTACCAG	120
TCGCTGCAGG	AATCTGTTCA	GGTCTCCCTG	GCCCTCTTTC	CAGCTTTTAT	CCATCAGTCA	180
GATGTGACTG	ATGAGATGCT	GAGCTTCTTC	CTCACTCTGT	TTCGAGGCCT	TAGAGTACAG	240
ATGGGTGTGC	CTTTCAGTGA	GCAAATCATA	CAGACTTTCC	TCAACATGTT	TACCAGAGAG	300
CAGTTAGCCG	AGAGCATCCT	CCACGAGGGC	AGCACAGGCT	GCCGGGTGGT	GGAGAAGTTT	360
CTGAAGATCC	TGCAGGTGGT	GGTCCAGGAG	CCAGGCCAGG	TGTTCAAGCC	CTTCCTCCCC	420
AGCATCATCG	CCCTGTGCAT	GGAGCAAGTG	TATCCCATTT	CGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:1245:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 444 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

GAATTCGGCC	AAAGAGGCCT	AAGCTTATGG	GGAGGACACA	TATTTACTCA	AACATCCTGG	60
CAATTCATAT	CTAGGGCACT	CCCTCTGTGT	GTGACACGCC	CTTGCAATGTG	TCAAATGTCA	120
TCTGATAACA	TTGATGAAAA	ATATCATTCA	CTTCTTCTTG	GTGCAGAAGG	CATAGACCGG	180
ATTATGCAAT	CACTGAGAAG	TAGCTTCTGG	ATGTGTTTTC	TGGTGGCGTC	TTAACAATT	240
CAGCCGACTG	AAGGCTCTTG	GACACTTGGA	ACATTTGTAG	GGTTTCTCTC	CGGAGTGGAT	300
GCGCTGGTGC	TCCTTCAGGC	TCCCCCTGTA	GGTGAAAACT	TTCTTGCACT	CTTTACATTC	360
GAAGGGCTTC	TCCCCCTGTG	TGGCTTCTCT	TGTGACACTT	CAAGTAGGAC	TTCTGGGTGA	420
ACTGCTTAGG	CCTCTTTGGC	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 431 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

GAATTCGGCC	AAAGAGGCCT	AGTATTTTGT	ACTAGTTTTT	TAATAATTAT	AAGTCTTACA	60
CGTTCTCTAA	TTCTTCTGA	ATCTGTTTAA	TTTTTCTCCC	TTGGGAATTG	TTAAGTGTAC	120
ATGTATTGTG	ATAACTGCTA	TAATTTTGCT	TTTATTGATT	TTTTTTGCTT	TATATCTGCT	180
ACAATTTGGT	TCCTCCAAAT	CCCATGTTGA	AATCTGATCC	CCAGTGTTC	TGGGGGATCT	240
AATAGCAGGT	GTTTGGGTCA	TGGGAACAGG	TCCCTCATGA	ATGAATTAAT	GCCCTCACTG	300
GGAGCAGGGG	ATAAGTAAGC	TCTCACTCAT	TTAGTTCCCA	AGACAGCTGG	TTGTTTAAAA	360
GAGCCTAGTG	CCACTTCTCT	CTTGCTTCCT	TTCTTGCCGT	GTGATCTCTG	CACATGCCAG	420
CTCCCCTCGA	G					431

(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 389 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

GAATTCGGCC	AAAGAGGCCT	ATTTTTTTTT	TTTTTTTTTT	TTTTTTTTTT	TCNGGGTGTA	60
GAACATTAT	TTATTTTCC	CACAAATCAC	TGAAAGTTTA	GGTCAGTGGG	AAATAATTTT	120
AATCAAATAA	TTGTACATAT	TCTTCCCACA	TATCCTGCCT	TGTATTAGGA	AATGACATTG	180
TGATCCATTT	CATTACAAGT	AAAATATTAC	AAAATATTTA	CAGGAAAATA	TTAAAAATAA	240
CTCAAACACA	AAAGGCAAGA	TGAAATAAAC	TGTTTTTTTT	TCTCCAGAAA	TCTCTACTCC	300
AGTGCCCA	GCACACAAGA	GTCAAACAA	ATAAGCAACT	AAGATCCCCC	GATCACAAAT	360
TTCCAAAGAA	CTAGGCCTCT	TTGGCCGAA				389

(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

GAATTCGGCC	AAAGAGGCCT	AAAGGAAGGC	CACTTCTCAA	CTGGCAGAAC	TTCTGAAGTT	60
TAGAATTGGA	ATTACTTCT	TACTAGTGTC	TTTTGGCTTA	AATTTTGTCT	TTTGAAGTTG	120
AATGCTTAAT	CCCGGGAAG	AGGAACAGGA	GTGCCAGACT	CCTGGTCTTT	CCAGTTTAGA	180
AAAGGCTCTG	TGCCAAGGAG	GGACCACAGG	AGCTGGGACC	TGCCTGCCCC	TGTCITTTCC	240
CCTTGGTTTT	GTGTTACAAG	AGTTGTTGGA	GACAGTTTCA	GATGATTATT	TAATTTGTAA	300
ATATTGTACA	AATTTTAATA	GCTTAAATTG	TATATACAGC	CAAATAAAAA	CTTGCAATTA	360
CTTAGGCCTC	TTTGGCCGAA					380

(2) INFORMATION FOR SEQ ID NO:1249:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 386 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

```
GAATTCGGCC AAAGAGGCCT GTTTGGTTTG TGAAGTACT TAAAAATACT AAAATAAGCC      60
AAATAGATGC TAACAATACT AATTTGCACA CAAGATTGTA AAAAAAGTACT TCAAGTTTGA      120
TCTCTTATCC CTAGAGAAAG TAAATAAAAA GTGGCTCTTG CAAAAATAAA TGAAAACAAA      180
ACCACCAACA AAAACTAATC ATATAAGATA CTGTTTTTCT TTTTGAATAC TTCAATTGGT      240
CCTATATTAG GATAAGGTTT TGATAGCAAG GACTTCCTAG CTCCTTCCTT TATCTCCAT      300
TCTCTAGTCA CTTCCGTGTT TTTATCAAAC AAGGCTACGT GTAGGCTTTC CTACAAAGTC      360
AGATTGAATT CTACCACCCT CTCGAG                                     386
```

(2) INFORMATION FOR SEQ ID NO:1250:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 428 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

```
GAATTCGGCC AAAGAGGCCT AACCATGTCT GACCAGATCA TTGGGAGAAT TGATGATATG      60
AGTAGTCGCA TTGATGATCT GGAAAAGAAT ATCGCGGACC TCATGACACA GGCTGGGGTG      120
GAAGAACTGG AAAGTGAAAA CAAGATACCT GCCACGCAA AGAGTTGAAG GTTGCTAATA      180
ATTTATACTG GAATCTGGCA TTTTCCAAAG CCAAGAGAAG ATCGAATGGC TTTTGCAGC      240
TAACTACTAT GTGTAGACAG GTTTTATATT ATAAAGTATG CATTCTTATC ACCTAGTATA      300
TAGTTAGTTT GTAGAGTGAT TTCCCCCAG TTTCTTGAAC ATGGTATCTT CACATCTTGG      360
ACCTTGGTCA GTTGTGCTAT TCATTATTAA AACTAAAAC TTTGGCGGTT TAGGCCTCTT      420
TGGCCGAA                                     428
```

(2) INFORMATION FOR SEQ ID NO:1251:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

```
GAATTCGGCC AAAGAGGCCT AAGAAAAGTA GTATGAATGA GTTTTTCTAC ATATTAACTA      60
CAATTATGGA TAATTTGTGA AATGTTTTTC CATTTTAAA TGTAAGAGTC TCTATCTCCA      120
CTCACAAGC AACAGGCACT GCTAGGGGTC TTAGGCTAAC ATCTGCCACC CCACCAGTCT      180
GCATGGCCCA TAAACAGGTG CAGAGGACCA GAGTTCACCT GTCAGCAGCA CCGCAGAATC      240
CAACTCTAGG CCTCTTTGGC CGAA                                     264
```

(2) INFORMATION FOR SEQ ID NO:1252:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 436 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

GAATTCGGCC	AAAGAGGCCT	ACTTTTTTTT	TAATTTTCCA	CTTCTTCTT	AACTTTACTT	60
CTCTTTTTGT	CCCCCCCCAT	CTTACAGAAG	TTGAGGCCAA	GGGAGAATGG	TAGGCACAGA	120
AGAAACATGG	CAAACTGCTC	TGTGCTTTCA	AACCAAAGTG	TTCCCCCCTA	CCCCAAATTT	180
GTCTAAGCAC	TGGCCAGTCT	GTTGTGGGCA	TTGTTTTCTA	CAACCAAATC	TGGGTTTTTT	240
TCTTCTTTCT	TTAAACATAG	AGGTACCACC	ACAAGGGATG	CCCTACTCTC	TCGCAGCTCT	300
TGAAAGCATC	TGTTTGAGGG	AAAGGTCTCT	GGGCAAGCAA	GTGGTTATTT	GGATTGCTTG	360
CTTCCCTTTT	TCCACCTGGG	ACATTGCAAT	CATAAAATAA	CAGTAAATTC	CAAACCTCTA	420
GGCCTCTTTG	GCCGAA					436

(2) INFORMATION FOR SEQ ID NO:1253:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 399 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

GAATTCGGCC	AAAGAGGCCT	AGGGTAGATC	ACTTGATATC	AGGAGTCGAG	GCGGGAAGAT	60
CACTTGACGT	CAGGAGTTCG	AGACTGGCCC	GGCCAACATG	GTGAAACCGC	ATCTCCACTA	120
AAAATACAAA	AATTAGCCTG	GTGTGGTGGT	GGGCACCTGT	AATCCCAGTG	ACTTGGGAGG	180
CTAAGGCAGG	AGAATTTCTT	GAACCCAGGA	GGCAGAGGTT	GCAGTGACCA	GCAAGGTTGC	240
GCCATTGCAC	CCCAGCCTGG	GCGATAAGAG	TGAAAACCTC	ATCTCAAAAA	AAAAAAAAAA	300
AAATTCCTTT	GGGAAGGCCT	TCTACATAAA	AATCTTCAAC	ATGAGACTGG	AAAAAAGGGT	360
ATGGGATCAT	CACCGGACCT	TTGGCTTTTA	CAGCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:1254:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 444 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

GAATTCGGCC	AAAGAGGCCT	ACCCGGTACT	TACTTCTCAA	TCCTAAAGAG	AGAAAACAGG	60
TGTTTGATCA	GTATGTAAAG	ACCAGGGCAG	AGGAAGAACG	CAGGGAAAAG	AAAAATAAAA	120
ATGCAAGCCA	AGGAAGATTT	CAAAAAAATG	ATGGAAGAAG	CAAAATTTAA	TCCAAGAGCA	180
ACTTTTAGTG	AATTGTCAGC	CAAGCATGCT	AAAGATTCAA	GATTCAAAGC	AATTGAAAAG	240
ATGAAAGACC	GAGAAGCCTT	GTTTAATGAG	TTTGTGGCCG	CTGCTAGGAA	GAAAGAGAAA	300
GAAAGATTCA	AGACCAGAGG	TGAGAAGGTA	AGATGGTTTT	AGTTCCAGTG	GTGTGATTGA	360
TGGGAGTGTG	AATGGGAAAG	GTCTATGCTG	GTGTTATGTT	TCTAACCTTA	TTCATTGGCA	420
TAAATAATAG	GACGTACACT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

GAATTCGGCC	TTCATGGCCT	AAGAAGGACT	ACCCTGCACT	GCTTTCCTTG	GATGAGAATG	60
AACCTCGAAGA	GCAGTTTGTG	AAAGGACACG	GTCCAGGGGG	CCAGGCAACC	AACAAAACCA	120
GCAACTGCGT	GGTGNTGAAG	CACATCCCCT	CAGGCATCGT	TGTAAAGTGC	CATCAGACAA	180
GATCAGTTGA	TCAGAACAGA	AAGCTAGCTC	GGAAAATCCT	ACAAGAGAAA	GTAGATGTTT	240
TCTACAATGG	TGAAACAGT	CCTGTTTACA	AAGACAACT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

GAATTCGGCC	TTCATGGCCT	AGTGGGAGTT	TGCTAATGTG	AAACCTAATG	ATGTCTGAAA	60
ATGGTCCTGA	TGGGTATTAA	TAGCCATCTG	GAAAAATTTT	ACATCTTCAC	AAATAATCCC	120
AATAATTTAT	ATTGTGAAGA	TATTATCCTG	ATAGTCCTTC	TTTTCTTATA	TTCTGTTCGG	180
CTGTAGGATG	AGAGCAGTAT	GAAGCAAACA	GAAGACATTT	TGAAATTAAT	CACAAAATTC	240
CCATTGCTTT	GAAGCCTGCT	ATTATTATAC	TAAGCCTTCT	TATAGCTTTA	AAAATCAAAC	300
AATGCCAAAC	AGTATATCTA	ACATTTTTAA	TTTCCTTTGA	GCCAAACCAA	TTTGTTTAA	360
ATTTCTCTGC	CTCCGTGAAG	ACAAGCTGGG	CTGGGGAGGA	CGGTGTCTAG	GAGGGATGAC	420
CCCCTCAGC	TCCAGGCAGT	GTTCTGCCGA	GACCCCAAGA	ACTCGGGGTG	TCAGAGGGCA	480
AAGGAAGTAC	CTGCCTTTCA	CGGCTGCTGA	CTTCTCAGGG	CTGCAAGCAG	CACAGAATGT	540
TATCCTTACG	TCCTGAGCCG	GTTTAAGTCT	GTGGAAAAGG	AAGCACGGGA	GAAATCCACG	600
TAACCTTTGC	TTTCTTTTAA	AGGGAAGCGG	TTCCGCCGTG	AACTTGGAAC	CCTCAGCTCC	660
GGGTGTTCTC	GGCAGAAGGG	CAGCTCTCGA	G			691

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

GAATTCGGCC	TTCATGGCCT	AAGCTGATCC	ACGATCAGAG	TGCTCCCAGC	TGCCCCAGCA	60
GCTCCCCGTC	CCCAGGGGAG	GAGCCTGAGG	GGGAAGGGGA	GACAGATCCG	GAGAAGGTGC	120
ATCTCACCTG	GACCAAGGAC	AAGTCGGTGG	CAGAGAAGAA	TAAGGGCCCC	AGTCCTGTCT	180
CCTCTGAGGG	CATCAAGGAC	TTCTTCAGCA	TGAAGCCGGA	GTGGGAGAAC	TTGAACCACT	240

CCAACGTGCG GCGCATGCAC ACGGCCGTGC GGCTGAACGA GGTATCGTG AAGAAATCCC 300
 GGGACGCCAA GCTTGTTTTG CTCAACATGC CTGGGCCTCC CCGCAACCGC AATGGTGATG 360
 AAAACTACAT GGAGTTTCTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1258:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCTGAG GGAATAACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTGTTGG 60
 CATTGCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT 120
 TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA 180
 GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGA GAA AAGGATGACT TTAAGCAAGA 240
 AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCAATG GACGACGATG ATGACGATGA 300
 TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA 360
 ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG 418

(2) INFORMATION FOR SEQ ID NO:1259:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 189 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

AAAAATTAAA TAATGCTTGA CTTTTTTTTT TTTTTTCTC TTTTGAGGC AGGTTCTTGC 60
 TCTGTACCC AGGCTGGACT GCAACAGCAT GATCTTGGCT CACCTCCGCC TCCCAGGCTC 120
 TGGCAATCCT CCCACCTCAG CCTTCAGAGT GGCAGAGACT ACAGGCTCAT ACCACCGCAC 180
 CCACTCGAG 189

(2) INFORMATION FOR SEQ ID NO:1260:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GCGATTGAAT TCTAGCCTTT CCTCCGTTCA AGTAAATTTA GAAATTCCT AAGTTTCTT 60
 TATAACAGGT AGCCTAAATC TATATCATAC TTTTAAATA AAAATCTAGG TGCAAATTTG 120
 TTCTTATGGT TAAGGTTAAC ATGTACACTT CACAAACATT GAGACTTTTG TTTTGTTTTC 180
 TGGGACAAGG TCTTGTCTG TCTCCAGCT GGAGTGGATA CAAGCATGGC TTGCTTCAGC 240
 CTCAACCTCC CGGACTCAAG CGATCCCCC CCCTCGAG 278

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

GAATTCGGCC TTCATGGCCT ACTCACTGGA TGCTGGGGGA GGGCCCCTCA GGTGAGCAGC	60
CCACCACTGA CTTCAGCGTT GCTGGCTCGG TTATCAGACT CTCATCCAAC ACAAGCTCAC	120
AGGGAAAGCC GTTCCTTGCT CTTGTGGAG GGAGCTACCG TCATTGCCCT GAGACCACCA	180
GCCAAGAAAG TAGGTATGTC CAGGTAGGGA ATTCAGAGGG ACCCAGTGCA TCCAATTATA	240
CAATTATACC CAGAAAGTCC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

GGTCAGTATT GAAGGTTGTT TTCTGAGCCA TTGTATGAAG CTGCTGTTTT GCGTCCCTA	60
ATGCAGGGTG AGATGGTAGT GTGATTCTTG TTGTGACATC TCGTGACTGG GCAGGACGCT	120
GAATACTGAT TGCTGCAGAT GGAGGATGCT GGATAGACAA GGTGGCCTA CTAAGTGCTG	180
AATCAGTAGC ATGCGCCGCT GTCGTAGTGA TGACTGGAGA CTGAGCTCTG GTGGCTGAGA	240
CAGTTGCTAC CACAGCAGGA GGGATGGCAT TGGAGGTGGT CACAGGTGGC CGAGACTGGA	300
TTGGTTGGTG AATGATGTGC TGTACTGCTG GCTGAGCAGT AGCAGCATTT GGCAGCTGTG	360
AGGTCGGCCT CAGGACTGTG GTTACTTTAG AACTGGACAT CACAGCAGCA GCAGCTGCAC	420
CTCGAG	426

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

GAATTCGGCC TTCATGGCCT AGGCCGGTGT TTATGCACGA TGGCGTTGAA AGCTAGTCCA	60
TCTCTCCAGC TGGTGGTGAA GTTGTGTACA TTGACGTTGG GATAACCTGC AGTCTTCATC	120
TGGCACCACA GAAGCAGGGC ATCCTTGCT GACTTCTTCT CTTGTGTGTC TTCTGTCTCC	180
ACACTGATGT CTTGGATCTG GAATCGAAGG ATGATGGTCC AGACCAGCCC AAGGGTCAGT	240
CGGTGGTTTC CGTCCACAAT GTCATGGGAG CCCATGTTTT CCAAGTGCAC TTTCTGCTCC	300
TTGAGGAACT GCAGTGCCTT GTCCACGTT TCCAGGCAGT GGATCCGCAT GCGGCCCTTT	360
GTAGGCTTTG GCAGTATCTC TCCCAGAGAC ACCTCGAG	398

(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

GAATTCGGCC TTCATGGCCT AAAAAAAGCT GTTAAGAAAA TATGTTTAA AAATTTGCC	60
AACAGGAAGG AGAAAATTAG AATCTAATAG CAAACTTGTG TCAAAGCAGG GGAGACCACA	120
TGATCTTCCT CTTTGAAAAT CTGTCCTGGG TGATGACCAT ATGCTCTCTA AACAGGTTTT	180
CTGTGTTTTA GGGAAAGAAG CTCAGAAAGG ACCCCTGCTC TTTGATGACC TCCCTCCGGC	240
CAGCAGTAAC CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

GAATTCGGCC TTCATGGCCT ACAGAGTCTA ATTAGCCATA TTTATATGAT AATAATAAAC	60
ATTTTGGCTA CAGTCCTACC TAGATTTTTT TTTTITAGAT GGAGTCTTGC TCTGTCGCCC	120
AGGCTAGAGT GCAGTGGTGC GATCTTGGCT CACTGCAACT TCTGCCTCCC AGGTCAAGC	180
AACTCTGTTG CCTCAGCCTC CCAAGTAGCT GGGATTACAA GCGCACATGA CCACGCCTGG	240
CAGCTCGAG	249

(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

GAATTCGGCC TTCATGGCCT AGGTTATATA GCAGTGATGC TTTCATAGTA TTTTCTTGA	60
ATAAGGTCCC CAAAACCTTA TTAAGTTCCT GGTAGGCATG GAGCATTGAA GATGGCAGAC	120
ATGGTGCACT CTCTCAAGGA GTTACGCTC TAGTGGAGAA AACAAATCAGA CAGCCTTAAA	180
ATACATGTAT GGCTACTATA ATAAATACTG TGAAGCAGGA GTGCACCACG AAACCTGGAG	240
TCCTCTCCAT CCTCCCTTC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:1267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

GAATTCGGCC	TTCATGGCCT	ACTAGACCTG	CCTCGAGATT	AGGGGGGTTA	GACTCAGAAT	60
TCTGTCCAAA	CTCCTGGACG	ACCTCTTGAA	ATTAAGTCAG	GGATTTTATG	TACTGGGTTA	120
ATTTCTGAAC	CTCTGGGTAT	AATATTAGGT	TTGCATGTAG	AAAGGGTCTC	CAGTATAGGA	180
CTTCAAAGAA	ACTAAGCCAT	AGACGTAATT	TAAGGGCTGT	TCTGATCTGA	AGAAGTGCCA	240
TGGGTAGAAG	TTTAGCCAT	GGTAAAGAGG	CTTCTGGCA	TCATTTGCTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

GAATTCGGCC	TCATGGCCTA	CTGGTCCAAG	CTGATTACCC	TCATAGTGTC	CATCATTGAG	60
GAAGACAAGA	ATTCTACAC	TCCCTGCCTC	AACCAGTTTC	CCCAGGAGCT	GAATGTGGGT	120
AAAATCAGCG	CTGAAGTGAT	GTGGAATCTG	TTTGCCCAAG	ACATGAAGTA	CGCCATGGAG	180
GAGCAGACA	AGCATCGTCT	ATGCAAGAGT	GCCGACTACA	TGAACCTCCA	CTTCAAGGTG	240
AAATGGCTCT	ACAAATGAGTA	TGTGACGGAA	CTTCCCGCCT	TCAAGGACCG	CGTGCTGAG	300
TACCCTGCA	GGTTGAACC	CTTCGTCATC	CAGTGGCTGG	ATGAGAATGA	GGAGGTGTCC	360
CGGGATTTC	TGCACGGTGC	CCTGGAGCGA	GACAAGAAGG	ATGGGTTCCA	GCAGACCTCA	420
GAGCATGCCC	TATTCTCCTG	CTCCGTGGTG	GATGTCTTCT	CCCAACTCAA	CCAGAGCTTT	480
GAAATCATCA	AGAAACTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

GAATTCGGCC	TTCATGGCCT	AGGCCCTGC	TCCACCTGGG	GGGACTGGGA	GTGTGAGTGT	60
GCATGGCATG	TGTGTGGCAC	AGATGGCTGG	GACGGGTGAC	AGTGTGAGTG	CATGTGTGCA	120
TGCATGTGTG	TATGTGTGTG	TGTGTGTGGC	ATGCGCTGAC	AAATGTGTCC	TTGATCCACA	180
CTGCTCCTGG	CAGAGTGAGT	AACCCAAAGG	CCCCTTCGGC	CTCCTTGTA	CTGTTTTCTT	240
TCCTTTTGT	GTTGGTTTTA	AAATACATTC	ACACACAAAT	ACAAATTGAC	AGGTCAAAAT	300
CCATGAAATG	AGATCCCCCA	GCGGCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 502 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

```
GAATTCGGCC TTCATGGCCT AAAAAAAAAA TACTGATTCA CTTTGGCAAT TTTTCAGATA    60
CTACTTGATG TGACACCTCC CCTAGGCTTG CTGTGGGTCT CTTGGAAGAT AGAGCTATAT    120
TAACTCCTTG ACTTAAAGGG CAGCAGACTA TATAAGGTCT CTTTACAGAC AGAGTAGGGA    180
GAATAATGAA AAACCTTTTG ATTTCTAGAG AGAAGAGAGA AGACATAGCA ATGGAAGTGT    240
TCTTAGCTTT GTTGCTACA ACTCTTCAAA GTTTAATTTT AGATTCAGTG CATTTATTCA    300
TAGAGCATGA AACATATAAT CATGCCTTTT ACTAATTGCG GATACTTAAA ATTATATATT    360
TTTGACCTAC TGTGTTATGG TCAATTTGAA AAAGAATGGT TTGATTATAT ATTATTGTCT    420
GTAGATTCCC TGTACTATTC TAGGATCATA TGACATATTA TCATTACTAA ATATAGCACT    480
AATTATTGAT GCTCCGCTCG AG                                         502
```

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

```
GAATTCGGCC TTCATGGCCT ACCCCTGACT ATTCAGTAGG AGAAGAAATC AAAAATCCAT    60
TCTTTTCTCC TTCTCTCCCT CCAACAGTGG CCAGGGGAAG GGAAGTGAG GGCAGGGGCA    120
AAAAGATTG GGAATTTTAA TTTATTTATT TATTGTGACT TTTCATTTT TTGGTATTG    180
GCTTTACTGG AATAGGAGGG CCCCTGCCCA CTGTGCCCCG TTATCCCTT ATTCCCCAAA    240
CCCTGCTCTC CCAACACCT ACTCACTTAA GCACCTGTCC TCGAG                                         285
```

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```
GAATTCTAGA CTGCCTCCA ATTTGAAGAT TTATTTCTCT CTTTGGATAT AGAACAAAAT    60
AACTTTATGT ACATTTTATT TCACTTTATT TTAATTGTTG GTTGGTGCAA AACAAATTGC    120
AGTTTTCCCA TGAAAAGTAA TGGCAAAAAC TGCAATTACT TTCGCACCAG CCAATATTT    180
TATTTTGAGA CAGAGTCGCA CTCTGTCACC AAGGCTGGAG TGCAGTGGTG TCATCCCAAC    240
TCACTACAGC CTCTGCCTCC TGGGTTGGAG AGATTCTTGT GCGTCAGCTT CATGTGTAAC    300
TGGAATTACA GGTGCACGCC ACCACGCCCA GCTAATTTT GTATTTTGTG TAGAGATGGG    360
GTTTCGCCAT GTTGCCCTGG CTGTTCTCAA ACTCCTGACC TCGAG                                         405
```

(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 412 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

```
GCGATTGAAT TCTAGACCTG GCTCGAGGCA GGTCTAGAAT TCAATCGGCT TCCTGGCAGT    60
GCCCTCTCCC AGATGAGACC TGATCTCTTT TTTGTTTTTT GTTTTTTGTT TTGAGACAGA    120
GTTTTGCTCT TCTTGCCAG GCTGCAGTGA GTTGAGATCG CACCACTGCA CTCCAGCCTG    180
GGTGACAGAG TGAGACCCCA TCTCAAAAAA AAAAAAAAAA ATCTGGCCTT ATGGACTGTG    240
TACTACACTC TAGTGGGGGT AAGAGGCAAT GGGTAAATAG GTAAGTAGAT TATTGGATGT    300
ATTAGAAGGG GCATGGGGAA TGTGGGTCA AGGTTATAGT TTAAATAGG GTGGTCAGGG    360
AAAGCTTTCT GAGAAGGTGA CATTTGAAAC AAATACTTGA AGGAGTCTCG AG            412
```

(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pair
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

```
GAATTCGGCC TTCATGGCCT AGCTATTTTT AAACAATATC TGAGATTATT CATTCAACTA    60
AAACTTATTA AGCATTTAAT ATCTGTCTGG CATTCTCAG GCACCAAGGA TATTTGTTG    120
AACAAAACAA AATCTTTGTC ACTATGGAGT TTACGTTTTG TGGTGGCATT GGAGTGAAGA    180
GCTAGGGAAT AAAAAACAA GTCAATATGT AGTATGCCAC TTGGTGGTAA GTCATTTGGA    240
GAATGATGTA GTAGGGAAAG AGGAAAAGGG TGTAGGCATC TCGAG            285
```

(2) INFORMATION FOR SEQ ID NO:1275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

```
GAATTCGGCC TTCATGGCCT ACTCCACACA TTCATCTCCC AAAGGACTCC TTGAATATTT    60
GCCCCAAAAC ATCAGCTCCC AGAAAACACC CCTCCAGTC ACACACACAC CCAAATTCTC    120
CGATGTATTT TCATTTTTTT TCTCCTCTTC TCTTCTCTT TTCCTTCCTT CCTTCTCTCT    180
TTTCTCTCTT TCCATCCCTC CCTTCCTTCC TCCCTCCCTT CCTTCCTCCC TCCTTCCTT    240
CCTCCCTCCC TCCTTTCCTT CCTCCCCCA CCCACTCGAG            280
```

(2) INFORMATION FOR SEQ ID NO:1276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

GAATTCGGCC	TTCATGGCCT	ACGAGTGGTG	CGATTTTTTT	TTCTTAGCTT	ATCAGCTATG	60
GTTAGTGTTA	GCGTATTTTA	TGTGCGGCCC	AAGACAATTC	TTCCTCTTCC	AGTGTGGCCC	120
AGGAAAGCCA	AAAGATTGGA	CACCCCTGGT	AGAGGCAGAA	ACTCACTGGG	TTAGTTCCAC	180
AGCATCTGAT	CAAAGATATG	AGGCCAAAGA	GCCTCTCGAG			220

(2) INFORMATION FOR SEQ ID NO:1277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

GAATTCGGCC	TTCATGGCCT	ACGAGCTGAG	ATTGCGCCAC	TGCACTCCAG	CCTAGGCAAT	60
AGAGTAAGAC	TCCATTTCAA	AAAAAAAAAA	AAATGTTGAT	CAAAAGAAGC	CAGATGACAG	120
AGTACTCACT	GTGTGAGTCC	ATTTATTGTA	AATTCTAGAA	CAAAAAATAA	ATATCCATTG	180
ATAGAAATGG	GAACAGTGTT	GGCCTATGAA	GAATGGAAT	TGACTGGAAG	GAGGCCTCTG	240
CTCGAG						246

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

GAATTCGGCC	TTCATGGCCT	AGCTGGGCGT	GATGGCGGGC	GCCTGTAGTC	CCAGCCACTC	60
GGGAGGCTGA	GGCAGGAGAA	TGGCGTGAAC	CCGGGAGGCG	GAGCTTGCGAG	TGAGCCAAGA	120
TTGCGCCACT	GCACTCCCGC	CTGGGCCCACA	GAGAGAGACT	CCATCTCNAA	AAAAAAAAAA	180
GAAAGAAAAA	AAGAAAATAA	ACAAAGAAAA	AATTAAGATT	TTTGAAATAA	AAACAAATAT	240
TAAAAATTAT	TGAAATATAT	TGAAAGTTTT	TTCACCATAT	ATATTTACCT	TTTAAAAGGA	300
TATGAATTCA	ATTATTTTAT	TTGCTTATGG	AAAATAGATC	CACTGCTCTA	AGATGCTACT	360
AATCATGCTC	AGAGGATTCA	CAACAAACAG	ACTGATAAGG	TATTAATTAA	AGCGCTCTAC	420
ATTAATAGA	GCATTCCAGT	TTTCTAGGGC	ACACTACTTG	CTGTATTTCC	AAGGTCAAGC	480
AAAATAGCTT	TCGTTTCGAG					499

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

GAATTCGGCC	TTCATGGCCT	AATGAGCTAA	AAGCAGTGC	ATCTCCGCAT	GTTGGAGCAG	60
CCAAGAAATA	GTTTGGTACT	ACCGACATTG	TCTAATCCAT	GTCACATCCT	CATACAATT	120
AATTGCTCAA	CCATGCATTT	AAACTCCTC	AAGAAAGGAT	TGGTACTGCA	ACTGTAGGTA	180
AACTGAAAAA	AAATAAGAAA	GAAAGAGTTG	GATGAAAATG	TGAAAGCCCA	AGTTTAGATG	240
TGCATTAAGT	ATTAAATAGC	ACAGTATCTT	CTTCATGGAG	CCTTTTTTCC	TCCCCCATCC	300
CCTGCAGCTA	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

GAATTCGGCC	TTCATGGCCT	ACTTCCTTTC	ATTTTGAAGC	AACAGTTTAT	AAACAGGAAA	60
GTCTACTGGT	TTCATAGAAT	CTGTGAGATT	TGCTTATTTG	CTACTGGTTT	CACGCGCGTG	120
GACTATATTC	CAGTGTTTCT	AGTCAAAGAC	CTTTATCCTC	AAATCATGAG	ATTAGAGTAA	180
AACAAC TGCT	GTAAGGTTGA	GCATTTCATG	ACCAATGACT	ATGAAGGCAC	ATTCACCAAA	240
CACAGGCACT	TTAAGGGCAT	CCTTGATTAA	TTTGCTAATT	GCTATTTTTC	GTTGGTATGT	300
GAATTCCTGC	TAGGAGGCCG	AGGCTAGTAG	GCAATGAAAA	AGACAGAACA	ATGGTAAAAT	360
GCAGCCCCGG	TCCTCTACAA	ATTGACAGTA	TAATTTAGGG	GCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:1281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

GAATTCGGCC	TTCATGGCCT	AAGATTGACA	AAGAAATAGA	GCTTCACAGA	ATTCTTCATC	60
ATAAGCATGT	AGTGCACTTT	TACCACTACT	TCGAGGACAA	AGAAAACATT	TACATTCTCT	120
TGGAATACTG	CAGTAGAAGG	TCAATGGCTC	ATATTTTGAA	AGCAAGAAAG	GTGTTGACAG	180
AGCCAGAAGT	TCGATACTAC	CTCAGGCAGA	TTGTGTCTGG	ACTGAAATAC	CTTCATGAAC	240
AAGAAATCTT	GCACAGAGAT	CTCAAACTAG	GGAACCTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

GAATTCGGCC	TTCATGGCCT	AGTAGTTTAT	TATATAGAAA	TTATTTGTCC	TTGTCTTAGT	60
TGTGCCCTTT	GACTCAGCAA	TTCCCCCTCT	ATAAAATTTT	CCCAAGCAGA	TGATTATGGA	120
TATATGCACC	AATTTGGAAA	CAGGGATGTT	TATTGTTTAT	AGTAGCACTC	AACTGAAAAC	180
AACATAGTTG	TCTTCAGGAG	CGGGGACTGA	TTAAATTATG	ACATGAAGCA	GAATAATGCA	240
AAATCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:1283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

GAATTCGGCC	TTCATGGCCT	AGCTGAAGAA	GGCCTTCACA	GAGCTTCAAG	CCAAAGTTAT	60
TGACACTCAA	CAGAAGGTGA	AGCTCGCAGA	CATACAGATT	GAACAGCTAA	ACAGAACGAA	120
AAAGCATGCA	CATCTTACAG	ATACAGAGAT	CATGACTTTG	GTAGATGAGA	CTAACATGTA	180
TGAAGGTGTA	GGAAGAATGT	TTATTCTTCA	GTCCAAGGAA	GCAATTCACA	GTCAGCTGTT	240
AGAGAAGCAG	TCTCGAG					257

(2) INFORMATION FOR SEQ ID NO:1284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

GAATTCGGCC	TTCATGGCCT	AAAGACTAGC	ATATTTATCT	TTGACTTGAT	TAATCAGACC	60
TAATTTGCAT	TCGCAAATGA	GACTGATAAA	AATGGATTTA	CCTTTTAACC	TTTAGAGGAG	120
GAAAGGTATT	TCTCTGCAAG	ATTTCTGGGG	CTATCGTTTC	TTAACCGATA	AGAAGCCACT	180
CCTTTATCAA	TAAAGATGAA	AATCCGCAAT	TTGCATTAGT	GAATGGGACT	GATTATTATA	240
TAGTTAATTA	GCATCTGGAA	ATGAGGATTA	TCTTAATTAC	AAAGCACAAAT	TTCCCTAATA	300
GCTACAAAAC	TGTAAGTTTG	ATCCATGTGG	AAATTGGTAA	CATTATTATG	TAATTAGTGA	360
TAACATTAAT	AGTGTAGAAT	ATTTAGATGT	AATTTGCATA	TGCAAATGTG	ATTTACCTGA	420
GCCAAAAACT	CGAG					434

(2) INFORMATION FOR SEQ ID NO:1285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

AGCAATATTT	ATTTTAGACA	GACTTCTGCG	TTATGACCCG	GCTGCTGGGC	TACGTGGACC	60
CCCTGGATCC	CAGCTTTGTG	GCTGCCGTCA	TCACCATCAC	CTTCAATCCG	CTCTACTGGA	120

ATGTGGTTGC	ACGATGGGAA	CACAAGACCC	GCAAGCTGAG	CAGGGCCTTC	GGATCCCCCT	180
ACCTGGCCTG	CTACTCTCTA	AGCATCACCA	TCCTGCTCCT	GAATTCCTG	CGCTCGCACT	240
GCTTCACGCA	GGCCATGCTG	AGCCAGCCCA	GGATGGAGAG	CCTGGACACC	CCCGCACTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:1286:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

GAATTCGGCC	TTCATGGCCT	AATCTTTTCT	AATTTGTCTT	AATGCTTTAT	AATTTTCTAT	60
GCAGAGGTCT	TGTAGATCTC	TTTCCAAGAT	ATTTGATGTT	TGTTTGTGTT	TTTGTGTTGT	120
TGTTTTTTGA	GACGGATCT	CACTCTGTTG	CCCAGGCTGG	AGTGCACTGG	CGTGATCTTG	180
GCTCACTGCA	ACCTCCSCCT	CCTGGGTTCA	AGCAATTCTC	CTGCCTCAGC	CTCCCAAGTC	240
TCGAG						245

(2) INFORMATION FOR SEQ ID NO:1287:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 232 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

GAATTCGGCC	TTCATGGCCT	AATTTTTTTT	CTCCTCTTTC	TTCTAGTACA	TATTGATAGG	60
TATAACATAA	TTAAGGTTTA	AAAAAAATTA	GACATAGTTA	TTCAGATTTA	GGACCAGTAA	120
GGATAGAACT	TTCTCTTATT	TATGAAAAAA	AATGCTAATA	ATTTTGGGGC	AGTTTTTTCC	180
TTTAATTATT	TTTTTCAATT	TCAAGTTTAA	TTTTATTTTA	GCTGATCTCG	AG	232

(2) INFORMATION FOR SEQ ID NO:1288:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGCCT	TCATGGCCTA	AGAAGATCAC	60
TTGAATCTGA	GAGGTAGAGG	CTGCAGTGAG	CGAAGATCAC	ACCACTGGAC	TCCAGCCTGG	120
GCAACAGAGT	GAGACCCTGT	CTCAAAAACA	AGAAGAGCA	CTAGCTTCTC	TATCAAGTAA	180
GTGTAGGGTT	TTAAAAACA	CAATGGACT	TTGGTAGACC	AAAACAAAAG	CCCACGAGTA	240
TGGAAGTTTC	CCTTGAAGTT	GGAAATTCAA	TTTCCCCCTT	ACCCCCCAA	CCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

GCGATTGAAT TCTAGACCTG CCTCGAGCCA TACCCATGGT CAGCCTCTTC CTCGTGTTCA	60
CGGCCTTCGT CATCAGCAAC ATCGGCCACA TCCGCCCGCA GAGGACCATT CTGGCTTTTG	120
TCTCTGGCAT CTTCTTCATA CTATCGGGCC TCTCCTTGGT GGTGGGCTTG GTTCTTTACA	180
TCTCCAGCAT CAACGACGAG GTCATGAACA GGCCCAAACA GCTCGAG	227

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

GAATTCGGCC TTCATGGCCT AGACAACTCT TAGCTAAATG TGGTTTGGTT TTGAGCTGGA	60
AGAGAGTACA AGGTGCTTCC GGAAGCTTC AAGCCTTCGG ATTCTGTGAG TACAAGGAGC	120
CAGAATCTAC CCTCCGTGCA CTCAGATTAT TACATGACCT GCAAATTGGA GAGAAAAAGC	180
TACTCGTTAA AGTTGATGCA AAGACAAAGG CACAGCTGGA TGAATGAAA GCAAAGAAGA	240
AAGCTTCTAA TGGGAATACT CGAG	264

(2) INFORMATION FOR SEQ ID NO:1291:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

GAATTCGGCC TTCATGGCCT AGGTGCTCTC AAGGATCAGT ACTGGGTAAC AATAATCAAA	60
CTTTGAATTT AAACATGCAT CTATTATTG TGTTTTTGT TTTGTTTTT GAGGCAAAGT	120
CTCACTCTGT CACCCAGGCT GGAGTGAAGC AGCCCAATCT TGGCTTACTG CAACCTCCAC	180
CCCCTGGGTT CAAGCAATTC TCCTGCCTCA GTCTACCTAG TGGCTGGGAT TACAGGCGCC	240
CGCCACCACG CCCAGGTAAT TTTTGTGTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC	300
AGGCTGGTCT AGAATTCAAT CGG	323

(2) INFORMATION FOR SEQ ID NO:1292:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 289 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

GCTCGAGAAA	CTTCTGCTGC	ACGTGCGTCT	TCCCCTCCAC	CTTCACCCCT	TGTGGCTCAC	60
TCACGCACCC	ACTCTCCAGT	CCACCCCTCC	TCAGAGACCC	TGTCCACTCA	TCCATCTCTC	120
TCCCATTGCG	CTTCCTCTTC	ACTCCGTTCC	TTCTGCCTCC	CACCATAATG	AAATCTTCTC	180
CATCCTTAAA	AGCCTGATTG	CCTCCTCTGG	ATTTTCCAC	ACTCTTGGGG	AACTTCCTGT	240
GACTCCCTGC	CCTTCACCAC	CAGCCTTTCC	CAAAGAGAAA	TCCCTCTCA		289

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

GAATTCGGCC	TTTATGGCCT	AGTTGAAATC	TTTAGGAATG	AACTTCTGAG	GGCCAAAAAA	60
TGTGACTGAC	GGGAACAATT	CTTAAACTGA	TTAACTAGCT	GTAATATAGT	TTTGTGAATT	120
TATTGCACTG	ATGTTGTACC	TTGTGGTATA	TCTGTCCCTA	TAAATAAGT	GTTGTTTTCT	180
CCTCTTTAAT	ATTGCTGTGA	ACAGTGGTGC	CCATTGTAGC	ATATGTTTGA	TTTTTTTTTA	240
TTATTTTATA	AGAAAACTAC	GTTAATTTTA	CCTTACTTTC	ATTGTAAATA	AGCCTGTCTT	300
CCTATCTGGA	TTTTTTGTGT	GCATACATAT	TCTACTGATT	AACTACTTTT	GCAGTTTTAA	360
TCCTGTATTA	TTTCTTCTAC	TTTGTTTTGT	GTAAAAGGGG	AAAAAATAAA	AAAAGCTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

GAATTCGGCC	TTTATGGCCT	ACAGGTGTAT	GTCACCATGC	CTGGCTAATT	TTGTTTTTCT	60
TTTCTTTTTT	TTTTTTTCCT	AGAGACAGGG	TCTCACTATG	TTGTCTGTCC	TGGCTGGTCT	120
CAAATCCTG	GGCTCCATCT	TCCCGCTTCG	GCTTCCTGAA	GTGCTGGGAT	TACAATAGGC	180
ATGAGCCACT	ATGCCCATCC	TAAAGTTTTA	CAGCCCAATA	ATAGTAATAT	TCCATCACTA	240
CAGCTATCAT	TGAGTTTCAG	AAGTTAGACT	GTTAAAAGTT	TCAGTAAAGA	GCTTTAACCA	300
GTTTATTGTG	GCAATACTGT	GTACACAATT	ATTTTTTGTA	AAAGGAAGGA	GATTTCTGTC	360
TTAAATAGCT	TTAATAAAGT	TTCACTTTCA	TATACAGGAA	ACCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

GAATTCGGCC TTCATGGCCT ACAGGCACTC CAGTTATAAT TATGTGCCTT TCTTCCATTT	60
CTACCACTTT CTCTGATACT TCTCACTTCT TTCTCTGGTA CTTCTCACTT CTTTCTCTGG	120
TATCATTTTC ATTCTTCATC ATTGTTTATG TGCCTTTACT TCAATTCCTT CATTATTTGA	180
ATTTTCTTT TTATCATCTT GTGATTCAGT TTTTATTTAT TTTTGTATAG TATTCTCCTT	240
TTCTTCCATT CCACTCGAG	259

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

GAATTCGGCC TTCATGGCCT AGTGGAGAGT GCTATCATTA ACACCTGAAC TCTGGGCCAG	60
CTTAAGTGTA TATTCTGTAA AAAATTGAA ATCCCCAAA TGTCACATGC TATGACAGTC	120
ACTTTCTTTA GTACTTTGTA ATCATACAAA ATGGTGTATG GGCTAAATAT TGCAGCACCT	180
ATGTCGTCAT CCTCCATGTT GCTTATTGAT CATGGAATGT TAATTTAGCA ATAATTTTCT	240
CTGTGTGTGC GCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

GAATTCGGCC TTCATGCAAG TAGGGTATGT AGGCTTCAGT TGGTTCTACT TTCAGAGAGT	60
TAAGATGGAA TGAGGCAGCT CATGGCACTA CAGGTCAGTT GCCTTCTCTC CAAAATGTTT	120
ACTCATGCAT GTGGGCACTC ATTGTATTTG AATAACAGCA ACAGTGCCTC CCTCAGTTTG	180
GAACCTCTAG TCCACTTGCT CACTCATGGT CCCTGCCTTA ACCCCAGTCA AGTTCAAAGC	240
CATAGGCATC ATTTGTCCGA CTGACATATT AGGGCATCTA CCAGTCAAAG GGTGATTGTT	300
G TAGATGACC TTTGGCCCGT TCTCGAG	327

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

GAATTCGGCC	TTCATGGCCT	ACACTCTCAT	GTTTGTGCA	GCATTATTCA	CAATAGCCAA	60
GGTATGGAGT	CAACCTGAAT	GTGGAACACA	TGAATGGATA	AAGAAAATGT	TCACACACAC	120
AATGAAATGT	GATTTAGCCT	TTAAAAAGAA	GGAAATCCTG	CCATTTGGAA	CAACATGGAT	180
GAACCTGGAG	GGCATTGTGC	TAAGTGAAAT	AAACCAGACA	CAGAAAGACA	AACACTGCAT	240
GACCTCACTT	ACTGTGGAAC	CCCTCGAATT	CTGGATCTCC	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:1299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

GAATTCGGCC	TTCATGGCCT	AATGAATTTA	GTATTATTTT	TATCATTTC	ATTGCAAATT	60
GTCAGTATCC	CCTGCTACGT	TTCTACTAAT	TTACCATCGC	TTCTTCAAAA	AATTGTGTTT	120
AGAGTGCTAC	AATTCAGAC	TTTGAAATGA	ATCACTATAA	CTTTTAAAAA	TTAGAGATTT	180
TAAAACTGG	AGATTGAATA	TATATAAAAA	ATACAAAATT	TGACATTAA	AACCTCATTG	240
AACTTTAA	AAAGCCAGAC	TCATATTAAG	GCACACACCC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

GAATTCGGCC	TTCATGGCCT	AGGGCCAATG	GCCAGGATCT	CTGGGGACTA	GAAGGGTGA	60
TTCCTGAACC	TGGGTAACAA	CGAGACAAAC	TCTAGCAATC	TGAGCAAGGG	AAGGGTCATC	120
AAAGTCCCAA	AATCTAGCCC	ACTAGCTGCC	TAGCCAGGTA	AACCAAGGCT	TAGGGAGTTT	180
AGACCCTTTC	ACATAAAGAA	GCTTAATAAA	AAGTGTGGG	TGAAGAGATA	AACACATGAA	240
GGGGTTGGCT	AAAGTCAAAA	GAAGATCCGA	GGCAGGTCTA	GAATTCAATC	GG	292

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

GAATTCGGCC	TTCATGGCCT	ACTCCTCATT	TGCCACCACC	AGGCCAGTTT	GTCCCTTTCC	60
AAACACAGCA	ATCAGGATCG	CCTCTGCAAA	GGATAGAAAA	TGAAGTGGAA	CTCTTAGGAG	120
AACATCTTCC	AGTAGGAGGT	TTTACTTACC	CTCCATCAGC	CCACCCCCCA	ACATTACCTC	180
CATCAGCTCC	CTTGCAATT	TTAACACATG	ATCCTTTGCA	TCAGGAGGTG	TCCTTTGGAG	240
TACCTTATCC	TCCATTTATG	CCTCGGAGGC	TTACAGGATA	GATAGATACG	ATCCAGCAG	300

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CCAATACCAC CTCCCCCTTA TCATCCCAGC TTAGTGCCAT ATGTGTTATC AATGCTTCCA 360
GTGCCACCTG CAGTGGGCCC AACTTTCAGC TTTGAATTAG ATGTAGAAGA TGGAGAAGTA 420
GAAAATTACG AGGCCCTGTT AAACCTGGCA GAGCGACTGG GAGAGGCAAA GCCTCGTGGA 480
CTGACTAAAG CAGATATTGA ACAACTTCCT TCTTATCGGT TCAATCCTAA CAACCACCAA 540
TCCTCGAG 548

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(2) INFORMATION FOR SEQ ID NO:1302:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 384 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

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GAATTCGGCC TTCATGCCCT AGTATCTATC TAGTGCCTGT TTGTGCGTTT TTTTCTTTCT 60
TCCGCTGCTT CCCCATTTTC CTTCTGTCCT TTTTCTCCTG CTCCTTGTTT TCCCAGCAGC 120
ACATGGGGTT CCTCGG GGA GCAGAGGTGG CCGCCGTGGG GGGGCGTTTG GGCTGCGGTG 180
CTGCGTCATT TTTCCTTTGC TTTCTCTTTC CTTTAGACAC TGGCCCAACT CCAGGCGTTT 240
CCTTTCATTC CCTCAGTGCT TCTCTTCTGA CCTGCATGTT GAGTTCTGTA TTGCTGGGGC 300
TTCCAACAAA AACCAGAGTC ACTGACAGAG GGAACAGCAG AGACCTTGTT GGTATTCAGC 360
TGTGATGGAT ATAGCGATCT CGAG 384

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(2) INFORMATION FOR SEQ ID NO:1303:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 140 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

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GAATTCGGCC AAAGAGGCCT AGGGTACGTG AATCTATTTT TTCAGCTGGA AATTTTATGA 60
AATCTGGTGT GTATTTTATA CTTATAGCAT ATCTCGAGGC AGGTCTAAAT TCAATTCTAG 120
ACCTGCCTCA AGAGCTCGAG 140

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(2) INFORMATION FOR SEQ ID NO:1304:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 620 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

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GAATTCGGCC AAAGAGGCCT AAATAAGTTT ACTTTTATTT TTGGTAACAC TTTACTGCAT 60
TGCTGAATA TTGACAATCA GTATGCATTA TGAAGCTACC TGGCTAACAT TGTGTAATCA 120
CTGTGTGTGC CAGGCCCTGG GTTCAATGCT CTACATGCAC TTATATTTC TTTAATTCTC 180
TCTGCAACCT GAGATGGTAT AGCCACCTCA TTTACAGAG TTGAAACTGA GGCTCAGAGA 240
CTGAAAGTTA AGCCTGAGGT TGCAGTCAAT AAGAGGCAGA GCTGGAACCTG AAACCTACCT 300

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GTGTCTGACC ACCAGTTCGT GTTCTGACGG CAGGCTAGTC TGCATCACAG AGTGTGGAGT 360
AGATGGTGCA TGCCTGCTAG GATGGGCTAG GTATCACTGT AGGTAAGAAA CAGCCCCAAA 420
CTATGGAAAT GTACACCACC GAAGGCTCTT TTCCTGCCCA TGCTGCACAT CCTCCATGGC 480
TCTCCTGTGC CCTGTGCCCC ACATGCCCTC ATCCTGCCAC GAGAATAAAG GAGCAGCCTC 540
CATATGGGAG CTGTGAGCTG CTCTAAGAGA TGAAGGAGAG AGTGGCCCGT CTCAATGGCT 600
CCCAACTCTT CTGCCTCGAG 620

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(2) INFORMATION FOR SEQ ID NO:1305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 736 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

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GAATTCGGCC AAAGAGGCCT ACTTTTGGCT CAATGTTTTC CAAACTTATT TGACCCCAAA 60
ACCTTTTTC TATACCCAAT AATAAGCTAC AGAACT ATA TTCTGCAAAT GTCTCTTGGA 120
ACACACTGCC TTAAACAGAT ATTTCTATAG CTGTCACTAT AGTTATGTTG CTCCCAAGCC 180
TAGTTATCTC CAGTTGTTTT AAGGGTGTTA TGAAAAATTC TTAAATATA TATGAATTTG 240
TGTAACACAC ACAGAGACAC ACACACATAC TACTTTAAGG GGGTGAGGAT CATTAAATTC 300
GATAATTTTT AAGTTTCCTA GTGATTCTCA ATCTCTTTGA ATTTTACTTA CATTACACA 360
CACACGCACA CACATATGTA TATACACATA TCATTTTAAG AAGCTGAGGA TCACTAATTC 420
AGATAATGTA TAAGTTTCCC AGTGATTCTC AACCTCTTGA AATTTTACTT ATAATTACAT 480
ACACACACAC ACTGCTACTT ATATAAATGT TCTCATGTAA TCATGGTAAC AGCTCAAATT 540
CCCAAAGCAA GGAAGACTT CTCATTGTCA GTTAAACCTG TTAAACATG AAAATATTCA 600
TTGAGCCTAG TTCCTTGTTA TAAATACAA GAAATAAGAC ATTCAAGGCAT TTTCCCTTTA 660
TGAAGATGTT CAGTCATCCT TTCCTTGAAC TACAATTAGG AAAAGTATAT GTCCTTATTC 720
CATTGAAGTT CTCGAG 736

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(2) INFORMATION FOR SEQ ID NO:1306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

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GAATTCGGCC AAAGAGGCCT ACAGCAATAT GCATCTTGCA CGTCTGGTCG GCTCCTGCTC 60
CCTCCTTCTG CTACTGGGGG CCCTGTCTGG ATGGGCGGCC AGCGATGACC CCATTGAGAA 120
GGTCATGAA GGATCAACC GAGGGCTGAG CAATGCAGAG AGAGAGGTGG GCAAGGCCCT 180
GGATGGCATC AACAGTGGAA TCACGCATGC CGGAAGGGAA GTGGAGAAGG TTTTCAACGG 240
ACTTAGCAAC ATGGGGAGCC ACACCGGCAA GGAGTTGGAC AAAGGCGTCC AGGGGCTCAA 300
CCACGGCATG GACAAGGTTG CCCATGAGAT CAACCATGGT ATTGGACAAG CAGGAAAGGA 360
AGCAGAGAAG CTTGGCCATG GGGTCAACAA CGCTGCTGGA CAGGTTGGGA AGGAGGCAGA 420
CAAAGTATC CATCATGGG TCCATCACGG GGCCAACAG GCGGGAAGTG AGGCAGGGAA 480
GTTTGGCCAG GGAGTCGACA ATGCACTCGA G 511

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(2) INFORMATION FOR SEQ ID NO:1307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

GAATTCGGCC AAAGAGGCCT AATTTTCCCC CACACCACAC CACTGTCCTC TGTGCCTGTG	60
GAAACCACTC AAATGCCTCT CCCCAGCCT TCTTTCAGTA ACAACCATCT CATCCGGTTG	120
ATTACTGTAG CTTTCGGCCT GTATAACCCC TCCTTATGTC ATGCCTGTAC CAGATGTTCC	180
ACTGCATCTG TATCCACCA GATTGCACAT ACTCTCGAG	219

(2) INFORMATION FOR SEQ ID NO:1308:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 344 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

GCACTGCGCC TGGCCCTTGT GGATACTTTC TAGGTGATTT GAGGAGGAAA GGCACAGCCA	60
TGTCTCCTAA AGTTAACAAG CACTAAGCTT TCCCAAGTAG TGAAATGTCA AGCCTCTGCT	120
TCTGTCACTT ATTTGTTTAT TCAGCAGAAA GTCACGTAGA GCCTTCTGTA CACCAAGCAC	180
AGTGCTGGGC AGTGAAAGAG ACAGACATGT CCCTGGATCC AGGGAGGAGA TGACCAAGTG	240
ATGGCTGTCA GGCCAGACC TTGCTGTTTG TCTGCAGCCT CTCCCTCAG GCAACTTGT	300
CTCTATCAGG AGAAATGAAA TAATTATTAT CTGGAGCTCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 565 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

GAATTCGGCC TTCATGCCTA AAAAGGGTCA GAGGAAGGCA GTATCCTTGG GGTGTTGCTG	60
AAGTTGAAAA TGGTGAACAT TGTGATTTTA CAATCCTAAG AAATATGTTG ATAAGAACAC	120
ACATGCAGGA CTTGAAAGAT GTTACTAATA ATGTCCACTA TGAGAACTAC AGAAGCAGAA	180
AACTGTCAGC TGTGACTTAT AATGGAGTTG ATAACAACAA GAATAAAGGG CAGCTGACTA	240
AGAGCCCTCG AGTTGCAGGG AGCCCGATC ATGCCACTGC TCTCCAGCCT GGGTGACAGA	300
GCAAGACTCT GTGCCCCCCC CCCACCCCAA AAAAAAGAA AACAAAAATT AAAATCTTTA	360
GTTACTGTAT TATTCAAAAA TGTCTACTTT CAAGAAAAAC TACAGCCATG CAAAGAAACA	420
GTAAAATGTG ACCATACTCA GGAAAAAAG CAGACAATAG AAATGGCTTC TCAGTAGGGC	480
TATATGTTGG ATTTAGCAGG CAAAGACTTC AGAGGCCTTT TAATAAGTAT ATTCAAAGAA	540
TTACAGGAAA ATATGAAAAC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

TGCACAGCTG TAGTACCCCA AGAAGAAAAT GTTACTTCTC TCATCTGGGC AAAACCCACA 60
GAAGACTTCC CAGCTTCTGC CACATAAAAG ACACAGAACT CGAG 104

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTTTGGC TTCTGTTTAG CATGCTATCC TGTGTGAAAG AAAGTGAAT CCAATATTAT 60
GGAGAGTATG TTAAAGCCAC CTCTGAAATG AAGACCACTC TCGAG 105

(2) INFORMATION FOR SEQ ID NO:1312:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 407 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

GAATTCGGCC TTCATGGCCT AAAGGGAAGG GAGGTGTGAG GAGGATGGAG TAAGAGTGAG 60
AGGTCTTAAG AACATGGAGG GAGGCTGTGT GTGATCGATG GAGAAATATG GTCCTGAGAG 120
ATTTCTTGTA GTCAAGAATG GCCAATACAT GTCTACCTTT AACTGGTATT GGAAGGAAGT 180
AGTTTCCTGC TCTGTGCTCT AAATACTCTC TATTACCCTC AAGATGTCAG CAAAATGTGA 240
TACATAGCAA TCTTGTGTTA GAGATGCTTT AGGAATTGCA GAAAAACCAT GCTATCAAGT 300
GGTAGGGAAG TGAGTGGCAA GAGGATGTCT GTCACAGAAA CTAGGGATAG AGGGGCTGGC 360
AATGGCAGAG ATGCAGGTGG AGTGGACTGA TTAAGGGGAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1313:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 292 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

GAATTCGGCC TTCATGGCCT AGGTCTTGCC ACATTGGCCA GGCTGGTCTC GAACTCCTGG 60

GTTCAAGTAG	TCCTCCACCT	CAGCCTCTCA	AAGTACTGGG	ATTACAAGCG	TTGAGCCACC	120
CTCCCAGCCT	TTGCCTTTTT	TTTTTTTTTT	TTTTTTTTTA	GGAGGAGAAT	TAATTGATAC	180
ATAGACCCCT	TAAGAGAAGG	GATGCTATGG	GCAGGAAGAG	ATTGAAGGTA	AAGGAAAAAG	240
GATTCAGCAC	CCAAGCAAAA	CAATTGGCCT	GTGATAGAAG	GCGCATCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:1314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

GAATTCGGCC	TTCATGGCCT	AGATCCAAGA	AGCTCAACAG	ACCTCAAGTA	GGATAAACAC	60
AAACAGATCT	TCACTAAGTC	CTACTGCTGA	AAGACAAAGA	CGAGGAGAAC	ATCTTGAAAG	120
CAGTGAGAGA	AAAACAACCTC	ATTATGGAGA	GAGCAATGAT	AAAATTCTTA	TCAGAACAGT	180
GGAGGCCAGA	AGGAAATAGA	GTGACATATT	CAAAATGCTG	AAGGAAAAAT	TTGCAACTAC	240
AAGTTCTAGA	TCCAGCAAAA	TTATCCTTCA	AGAATGAAGG	TTTAGTAAAG	ACATTCCCAG	300
ACCCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:1315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

GGCCCCAGCT	CCTGAGTAGC	TGGGATTACA	GGCATGCACC	ACCACACCCA	GCTAATTTTG	60
TATTTTtagT	AGAGACAGGG	TTTCACCATG	TTGGTCGGGC	TGGTCTCAAA	CTCCTGACCT	120
CAGTGATCCA	CCCGCCTTAG	CCTCCCAGAG	TGTTAGAATT	ACAGGCGTGA	GCCACTGCAC	180
CCGGCTGGGA	AACATTTTTA	AAACGGCGCA	GGGTGTCTCT	TGAAAGTCCC	AGGTTTCCTC	240
ATTGGCCCTG	CCATTGGCGG	GTGGGTGATT	TCAGGCAGGA	CACGCAGTGT	CTGGGGACCC	300
TGGCTTTCTC	ACTGGAAGAC	GATTGTTATG	GTCCAGAGGG	TGGTAACTCA	GGTGTTCATG	360
TCTGATTCTG	GATGTTCTCT	GCAGCTGCTG	GAGTCTCCTG	ATTGGAGAGC	AGCAAATGAC	420
TGTTCAATGA	CAGTTCTAGT	TGTACCTCTA	GCACCCCCAC	TCGCTCGAG		469

(2) INFORMATION FOR SEQ ID NO:1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

GAATTCGGCC	TTCATGGCCT	AATCTATGTG	TGTCAACTTT	CATAGAACCC	TACACCAAAA	60
AAGGTGAATT	TTATTCGTG	ATAAATTAAA	AAGTAAACAA	AAAGAGACAA	AAATAGTAAC	120

CAGGGAAGCT TTCAAAAAAT ATATGTTCTT GTTCAAGACC AGCATGGCCA ACATGGCGAA	180
ATCCCATCTC TAATAAAAAAT AGAAAAATTA GCCAGGCGTG GTGGTGGGCG CATGTAGTCC	240
CAGCTATCCA GCACCGCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC TTCATGGCCT AAAGGAATGG TATTTTGGCA ACGCAGACAA AGAAAGGAGT	60
GGCCCGTATG GATTTCA TGA GATGCAAGAA TTGTGGACCA AAGGAATGTT AAATGCAAAA	120
ACCAGATGCT GGGCTC AAG CATGGATGGA TGGCGACCAC TTCAGTCCAT ACCCCAGCTC	180
CGAGTCATAT AAGGTA CCC AGACAACCAC CTACGAATTT AAAGCTCCTA TAAGTTGCCC	240
TTTCTGCATC CGAAGT TGA TATTTGAAAG TTA AAAACGT TATCTTACAT ACATAGATCT	300
TAAACGTAT CTTACACCAC AACCTACTCA CAGATGCAAA GGCAGTGGTC GTGGTCTTCC	360
ATTGCTTGGG GTCCTGGGGC CGGGTTGAG GCTGAATGTC AGGGTTTCCT TTGCCATAAC	420
CTCATTTCTGC ACCACGTGCT GTCAGCCAGG CAGCCAATGT GGACTTGGAG GCTGGCATCT	480
GCTGGGCACT GCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

GAATTCGGCC TTCATGGCCT AATCTGGATG TCTGTCCAAG GCCTGACTGC TGAAGTCTTA	60
CTTTTCCTAC AAAACCCCTAC CCACATGGCC CTTCCTGCGG GAAGAGATCT TGAGCCTCCC	120
TGGCTATTAA GACTCTGCTG TGCAGCCTTC TTTTACTGGA CTCAGGGCTA TCTTCCCCAG	180
ACTAGGGCCT TCTTGAGGAC AATCGTGGTG GCCCAGTGGT TGACGCTGTC TCCCCTGCAT	240
GTAGTTGGTC TTCCTGGTTG CTTCTTGCCC CTGTGGCTCC CTTGGGAGAC TGAAACTCAG	300
AGGACAGCTT CTGGTCTGCT GTTACATGGC TCCCACAGGG AGACTGGCCC CACCTGTGCC	360
CCACCCATCA CAGCTAGGGC CTGGGATGGG TCAGACACTG GAAGAGCCTC CCCCTAGGCC	420
ATGCATATGG ATCGTGCCCA CACGCCTCGA G	451

(2) INFORMATION FOR SEQ ID NO:1319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

GAATTCGGCC	TTCATGGCCT	ACACTACGGT	ACTCCCAGCA	TATCACCCCT	AATGTAACCT	60
TAAATAACAT	GGCCATTTTT	TAAAAAGGAC	ACAGGAACTA	CATAACATT	TTTTTCAGAT	120
TTTGGAAT	TCTAAATATG	TCTAGAAAAA	CTTTCTTTC	TGTTCCATTC	TCCTTCTAT	180
TCTCCATGAC	CCCCTCCCCG	CGGACTGTAT	CAGGTACAGC	CTGTTGGAAA	TCCAGCACCG	240
CACATTAGGC	ACACCACTGG	TAAGTTTACT	TGTTGAGTTA	TCACCTTTT	TTTCCTTTTA	300
ATCAGAGAGG	CAGCTCTGTG	TTGAAGATGC	TAGGTAGTGA	TGGAAAAGAC	ATTAGGAAAA	360
TTTGTTACCG	TGGTAACCGG	GGATGGACAT	CATGACCTTT	TGTGATATGC	ATGCTGTGGC	420
CTTGGTAGTC	TCTTCCCCTA	ATTAACATCC	TGTGAGAAAC	GTGAGAGATG	ACTCGAG	477

(2) INFORMATION FOR SEQ ID NO:1320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

GAATTCGGCC	TTCATGGCCT	AGACGGAGGC	TGGAGATTCA	CATGGGGCGA	GGAGTTGCAG	60
ACCAGCCTGG	GCAAAGCATG	GTGAGGCCCC	GTCTCTGCAG	AAATGAGAAA	ATGAGCTGGA	120
TGTAGTGGCA	CCGACATGTG	GTCCAGCTG	CTGGGAGGGC	TGAGGTGGGA	GGATTGCTTG	180
AGCCTAGGAG	TTCAAGGCTG	CGGTGAGTAG	ATCGTGCCAC	TGCGCTCCAT	CCCTGGCAAC	240
AGAGCAAGAT	CATTCTCTCA	AAAGAAAAAA	AAAGCCATCT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:1321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

GAATTCGGCC	TTCATGGCCT	AGGGAAATGT	GTGATTGGGA	AAGAGGCAGC	TTTAAAAAT	60
GTGTCTGGCC	TTTGACCACG	CAATTCACT	TTCCAGTATT	TATTCTAGGA	AAATACTCAT	120
ACTATTGCAA	AGTTTATATA	TAAAGATAGT	TATAACTGCA	TTGTTTATCA	TTTACAAAAA	180
GAAAACATCT	GAAAGCCCAA	CAAGACGGAA	CTGTTTATTC	CACATTGGCA	CATTCATACA	240
AGGCAATGCT	CGAG					254

(2) INFORMATION FOR SEQ ID NO:1322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

GAATTCGGCC	TTCATGGCCT	AGGCACAGAA	AAATTGGAAA	GGATTGGTGG	TCGTACATCT	60
TGCAGCTCAC	TTAGTAGCTG	CATGCATGTA	GACCGGGTGG	TGTTGATGCA	GTGTTGACTT	120

GCTGGCATTG	GGGTGGGTGG	TAGCATGGTC	AAGCTGGCTG	AGTGATGGGA	TATTGTCTCA	180
GAGGTTGGTG	CAGGGAAACT	CTGTGGGTGT	GTCTAATGCA	AGGATAATGA	CAATGTCCTG	240
TCTGCCTGGT	CTTTGGGGGG	TCAGGTGGAG	ATGTCCTTTT	GGAAAGGCAG	CCATTCTCTT	300
TGAGTGTCCA	GAGGGCATGG	TGCAGGCACA	TGGATTGAGT	GCAGGACTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

GAATTCGGCC	TTCANGGCCT	ACTGTGTGTA	GAATTCTGTT	TTCTCATGAT	ATTGAAGACA	60
TTATTCCAGT	ACTTTGACTG	CTAGTATTGC	TGTTGAAAAG	TCTTAATTGC	CCTTCCTTTG	120
TAAGTAATAA	CCCTTTTATT	TGGCTGTGTT	AAGCCTTTTT	TTTTCTTCC	CATTTAATGT	180
TTTGCACTTT	TGTATAATGT	ATTGAGGGCG	TTATTTTTTT	CATTCCATCA	TTTTATTTT	240
TGTAATCCCA	CTTGGGATTC	TTTGGGCTTC	CTGGATCTGA	GGATAATAAT	AATGTCTTTG	300
AATAATTGTG	GAAAATTCTT	AACCATTATC	TCTTTGAATA	ATGCCTCTTA	TTTTCTCCTT	360
CTATAACTCT	AATTAGACAT	ATAGTCTATT	TTTCATGTTA	CTTATGCCTT	TTCATCCTTT	420
TTCGTCTCCA	CATACTCGAG					440

(2) INFORMATION FOR SEQ ID NO:1324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TAAAATGCCC	AGTTACCTGA	60
AATTGTATAA	ATTCTTGCCA	AAAGTGTTTG	AACTTAATAC	AAACTTCCCA	TCTCTTACCT	120
CTTAGCACTG	TGCTCATCTT	GAGGGGACAT	AGTCCCAATT	TTGTATTTTA	TATAATACTG	180
TTAATGAATA	TGTGTAGACT	TCATATGGTT	GTGGGTAAGA	GAATACTGCA	TTCAGATAGA	240
AAAGATGCTA	TATAGCTAAG	TTGATCCGCG	GATCCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:1325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

GTTTCCTTTT	CTACTTACAA	AGAAAATAAA	TAGAAATAGA	TTTTACATGC	TTTATTTCTT	60
TGAGACAAGC	CATTGTAAAT	TGTTACTAGA	CTAAGTAGTA	GTATACCAGT	CATTGACTGG	120
TCTTTTCAAC	TCCACTCAAA	TTTGTA AAAA	GCAATTCCTC	TTATACTATC	ATCTTTTTTG	180

TTTTTTAAGG TTTTGTGTGT TGTGTGGTTT TTTGGCAAAA CATGATACAT TTCTCATGCT 240
 TGATCTAAAG AGGCTTTACA TAAGAGACAG AGTCGCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:1326:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 348 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

GAATTCGGCC TTCATGGCCT ACTATCTTGA ATGTCCAACCT CCAACTCCTA ATTATTTTAA 60
 AAATCTATGC ACTTCTTTCA CTTGAATTTC TATGCCCTCA TAGACTTTAC AGGCACATGT 120
 TCTATCACCA ATTAAGAGAA ATTTAACTTA CACATTTTAC AACTTATACA TGCAATTTGG 180
 CTGAGCTTAT ACAGCACAGA TCAACATTAC AATCAATTTA CTGCCATGTT AAAAAAAAAA 240
 TCAGTGAACA TTGTTCGGCT GACCTAATTT TTTGAAATAA GTTGGCCATC AGTGTAAATTG 300
 ATTGAGCTAT CTGTACAACC CCCAACCTAC CTAAGCAAAG GGCTCGAG 348

(2) INFORMATION FOR SEQ ID NO:1327:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 680 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

GAATTCGGCC TTCATGGCCT ACACGGACTT ACATCCTCAT TACTATTCTG CCTAGCAAAC 60
 TCAAACTACG AACGCACTCA CAGTCGCATC ATAATCCTCT CTCAAGGACT TCAAACTCTA 120
 CTCCCACTAA TAGCTTTTGT ATGACTTCTA GCAAGCCTCG CTAACCTCGC CTTACCCCCC 180
 ACTATTAACC TACTGGGAGA ACTCTCTGTG CTAGTAACCA CGTTCTCCTG ATCAAGTATC 240
 ACTCTCCTAC TTACAGGACT CAACATACTA GTCACAGCCC TATACTCCCT CTACATATTT 300
 ACCACTAACC CTCGAGACCA CTTATATAAA ATACTTATTT ATTTCTTATT TCCCCTGACT 360
 AGAAATATAA GCTCCATGGT AGCAGAGATT CTGATTGCTG CCTACTCTAT CCCAGCTCC 420
 TATACTAGGC ACCATGAGTA CATGATCAGA AAATATTCAT GGAAAAAAT ACATAAATGT 480
 ATAACAATCT TCATTTGTGA GTAAGAAGAT GGGCTCTGGA ATCAGACTGC CTGGATTGAA 540
 ATCCTAACTT CATCACTTAC TAGTCATGGG ATATTTTACC TCAGTTTCAC TTTTGA AAA 600
 TGAAGATAAT AATGTCTACC TTATAGTATT GTGAGGATTA AGTGAATTAA TGCACACAAA 660
 ATTAGGCCAT GAAGGCCGAA 680

(2) INFORMATION FOR SEQ ID NO:1328:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 499 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

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GAATTCGCGG CCGCGTCGAC TGCTACTGAG CTTCTTGGCT CTCTTATATA TATTCTTTAT    60
TGTCATTTAC TTTGGTGGAC GAAGAGAAGG AGAGAGTTGG AATTGGGCCT GGGTCCTCAG    120
CACTAGATTG GCAAGACATA TTGGATATTT GGAACCTCTC CTAAATTGA TGTGTGTGAA    180
TCCACCTGAG TTGCCAGAGC AGACTACTAA AGCTTTACCT GTGAGGTTTT TGTGTACAGA    240
TTACAATAGA CTGTCCAGTG TAGGTGGAGA AACTTCTCTG GCTGAAATGA TTGCAACCCT    300
CTCGGATGCT TGTGAAAGAG AGTTTGGCTT TTTGGCAACC AGGCTTTTTC GAGTATTCAA    360
GACTGAAGAT ACTCAGGTA AAAAGAAATG GAAAAAACA TGTGTCTCC CATCTTTGT    420
CATCTTCCTT TTTATCATTG GCTGCATTAT ATCTGGAATT ACTCTTCTGG CTATATTTAG    480
AGTTGACCCA AAGCTCGAG                                         499

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(2) INFORMATION FOR SEQ ID NO:1329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

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GAATTCGCGG CCGCGTCGAC CGCTGCCAAA TGCTTCACTC CTATCTACTC TCCCGATTCC    60
TTATACTTCT GAACCTCCTC AACAGAAATC TTGCTCTCTC CCTAAATCCT CAGTGCAACA    120
TACGTCCGCA AAAACTAAAT GATCCCTCCT CAGCCAGACA GAAACTCTC AACATATCAA    180
CACTCCCAAG GCGTGGACAG                                         200

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(2) INFORMATION FOR SEQ ID NO:1330:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

```

GAATTCGGCC AAAGAGGCCT ACAGTCTTTT TAGGCATGTT TTTTTTTTTT TTGGTGTGTG    60
TGATGACAGG AATATGCATT TTATCTGTAG TGGTTTAA TCCGTGATTA AGCGTTGTTT    120
TCTTTTCAGA CTGCAAAATT CAAAATGGGG CTCTCGAG                                         158

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(2) INFORMATION FOR SEQ ID NO:1331:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 552 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

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GAATTCGCGG CCGCGTCGAC GATCATGAAG CGCTCGGTAG CCGTCTGGCT CTTGGTCGGG    60
CTCAGCCTCG GTGTCCCCCA GTTCGGCAAA GGTGATATTT GTGATCCCAA TCCATGTGAA    120
AATGGAGGTA TCTGTTTGCC AGGATTGGCT GATGGTTCCT TTTCTGTGA GTGTCCAGAT    180
GGCTTCACAG ACCCCAACCTG TTCTAGTGTT GTGGAGGTTG CATCAGATGA AGAAGAACCA    240

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ACTTCAGCAG	GTCCCTGCAC	TCCTAATCCA	TGCCATAATG	GAGGAACCTG	TGAAATAAGT	300
GAAGCATACC	GAGGGGATAC	ATTCATAGGC	TATGTTTGTA	AATGTCCCCG	AGGATTTAAT	360
GGGATTCACT	GTCAGCACAA	CATAAATGAA	TGCCAAGTTG	AGCCTTGCAA	AAATGGTGGA	420
ATATGTACAG	ATCTTGTTC	TAACCTATTCC	TGTGAGTGCC	CAGGCGAATT	TATGGGAAGA	480
AATTGTCAAT	ACAAATGCTC	AGGCCCACTG	GGAATTGAAG	GTGGAATTAT	ATCAAACCAG	540
CAAATCCTCG	AG					552

(2) INFORMATION FOR SEQ ID NO:1332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

GAATTCGCGG	CCGCGTCGAC	CTCAGAACTA	TTTAAATTTA	GTAAATTAC	TATTATATTT	60
TATAGTAAAT	ATTGGTCCAC	TTTATAGCTC	AGAACCTAAA	AAGAGAATAT	GTACCCAAAC	120
TTCTCTATGT	TTACAACCAA	CCCAGAGTTT	AAGATTCTGA	ATTGTGCTTT	GTTTTGTAA	180
AAATTTAACC	AAGGGTCAGG	CACAGAGGCT	CATGCCTATA	ATCCCAGCGC	TTTGGGAGGC	240
CGAGGCGGGT	GGATCACTTG	AGTTCAGGAG	TTCCGGGACCA	GCCTGGCCCG	CATGGTGAAG	300
CCCCGTCTCT	ACTAAAAATA	CAAAAGTTAG	CCGGGTGTGG	TGGCATGTGC	CTGTGGTCCC	360
AGCTGCTTGG	GAGGCTGAGG	CAGGATAATC	NCTTGAACCC	AGGAGGCAGA	GGTTGCANTT	420
GCAGTGAGCC	GGGATTGTGC	CATTGTACTC	CAGCCTAGGC	AACAAGAGCG	AAACTCTGTC	480
TTAAAAAATA	AAAAGAAAAA	AAAATTAACC	AAGGTTCTCC	TTTCTCTAAA	TCTAGCAATT	540
TGTTCTATTT	TTCAAGAAATA	AACTTAATAA	TTTTAATACA	GATTTTAGCT	TTGGCTTTTT	600
TCTTACTTTT	TAGTTTGCAA	ATTATTTTAT	GGTATTCCTA	CAAAGTAGAT	ACAAATTGTC	660
ATTGAGAAATG	CACCTTTTGT	TTTTCTGGGT	TTTTTTGTTT	GTTTGTGTTT	TTTTTCAGAA	720
AACTCATGGA	AAAGTACACT	GTTACCTCA	GCATCTCGAG			760

(2) INFORMATION FOR SEQ ID NO:1333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

GAATTCGGCC	AAAGAGGCCT	ANAAGTGGGT	AAGGAGCAAA	AAAAGTGACA	GAGGCCAGGC	60
GCGGTGGCTC	ATGCCTACAA	TCCCAGCACT	CTGGCCAAAT	ATTTGATTTT	AAATTTCCAT	120
TGTTACTGAT	TAAAAAATA	AAAAATCTGG	ACCAAGTTAA	CTGGAGATTT	AGAGGCTATA	180
GACACAATTT	AACATCCATA	CAGGCCTGTG	AACCTTCATG	AGAGAACAAA	CAAACAAACA	240
AAAAGTCTAA	TTCAAGAGTCT	CTCATTTCAG	CTTAGCCAAC	ACATTTGGAG	ACTTAGGGGC	300
CAGTTCTAGA	AGCTGCTTTT	ACCTCTAGAC	TCGGAGGGGC	AGGCCCTGTC	ACCGAAGGGA	360
GGAAAGTCT	TCTTGGCTGT	CAGCCCGGAT	TGAAGCCACT	TCGCTTCCCC	TGGCCCCAGC	420
TTTCTGCAC	TCTTTTCACC	GTGTCTGACA	CAGGGCAAAC	CACCAACCAC	TCAAATGAGC	480
AAACAATTCC	AGAAAAAAGA	ATCCGAGATA	AAGAATAACC	AACTAGGAGT	CTTTCCATTG	540
TAGCCTAAAC	CGTCGATTGA	ATTCTAGACC	TGCCTCGAG			579

(2) INFORMATION FOR SEQ ID NO:1334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

GAATTCGCGG	CCGCGTCGAC	CAACAAGGGC	AAAGGCCTTG	AGACACAAAC	CAACTGTGTG	60
GGTGTAAAGG	TAAGAAAGGC	CAGTGAGGCC	AGCATGATGA	ACTGGGGGAG	CATGGTGGCT	120
GATTTGGTCA	GGAAAGGAAC	AGAAACCAGA	CCACTTGGA	TCTTCTAGCC	AGAGTAAAGA	180
GACTGAGTTT	ATTCTATTG	TAATGGGGAG	CTATTCAGAG	AGGTTAATCA	TGGAAGTGAT	240
GTGACCTGAG	CTACACTCTT	AAAAGATGCC	TCTGGCTGCT	GTGTGGAGAA	TGAACCATGG	300
GGGCAAAAGC	AGAAACAAGA	AGACCACTTA	AGAGGCTCTT	GCAATAATTT	ATGTGAGAAG	360
AGTGATCATC	TTGACTAGGG	TGGTGGTGGT	AGAGGAGGTG	AGTGGTGGTC	AGGACTGAGA	420
GGAGCCAACA	GAATTGCTG	GCTTGCTTGG	ATGTGGGTGA	TGAGGCAAAC	TGAGAATCCA	480
AGATGGCACC	AAGGCTTATA	CCCTGAGCAA	CTGAACTCGA	G		521

(2) INFORMATION FOR SEQ ID NO:1335:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 775 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

GAAATTCGCG	GCCGCGTCGA	CGCTCTTGAG	TGAGACCCAA	CAAGCTGCTT	TTCACCAAAT	60
TGCAATGGAG	CCTTTTCGAAA	TCAATGTTCC	AAAGCCCAAG	AGGAGAAATG	GGGTGAACCTT	120
CTCCCTAGCT	GTGGTGGTCA	TCTACCTGAT	CCTGCTCACC	GCTGGCGCTG	GGCTGCTGGT	180
GGTCCAAGTT	CTGAATCTGC	AGGCGCGGCT	CCGGGTCCTG	GAGATGTATT	TCCTCAATGA	240
CACTCTGGCG	GCTGAGGACA	GCCCGTCCTT	CTCCTTGCTG	CAGTCAGCAC	ACCCTGGAGA	300
ACACCTGGCT	CAGGGTGCAT	CGAGGCTGCA	AGTCCTGCAG	GCCCAACTCA	CCTGGGTCCG	360
CGTCAGCCAT	GAGCACTTGC	TGCAGCGGGT	AGACAACCTC	ACTCAGAAAC	CAGGGATGTT	420
CAGAATCAAA	GGTGAACAAG	GCGCCCCAGG	TCTTCAAGGT	CACAAGGGGG	CCATGGGCAT	480
GCCTGGTGCC	CCTGGCCCCG	CGGGACCACC	TGCTGAGAAG	GGAGCCAAGG	GGGCTATGGG	540
ACGAGATGGA	GCAACAGGCC	CCTCGGGACC	CCAAGGCCCA	CCGGGAGTCA	AGGGAGAGGC	600
GGGCCTCCAA	GGACCCCAGG	GTGCTCCAGG	GAAGCAAGGA	GCCACTGGCA	CCCCAGGACC	660
CCAAGGAGAG	AAGGGCAGCA	AAGGCGATGG	GGGTCTCATT	GGCCCCAAAG	GGGAAACTGG	720
AACTAAGGGA	GAGAAAGGAG	ACCTGGGTCT	CCCAGGAAGC	AAACAGAGAC	TCGAG	775

(2) INFORMATION FOR SEQ ID NO:1336:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 155 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

GTAGATTTAG	ATGTACAGAT	AGAGGTATGA	TTTTTTTAAA	AGGCACCTCA	GTATGGGTAA	60
TGTTATCTTT	CTTGTTTTC	AGTGACACA	CATACACACA	CACCATAGAT	GCAAAGTGTG	120
TAGAAAATGT	ATTGAAGGAT	ACCCAGGTAC	TCGAG			155

(2) INFORMATION FOR SEQ ID NO:1337:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 138 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

```
GAATTCGCGG CCGCGTCGAC ATTCATGCAA ATAAATATAT TACTAAAATG CTACCTGTTT    60
CTTTTTCCTC TTTTCTTCC AGTTTGTAGT TATGAGATTG GGTCTTGCTA TGCTGCCCAT    120
GCTAGGCATG AACTCGAG                                         138
```

(2) INFORMATION FOR SEQ ID NO:1338:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 249 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

```
GAATTCGCGG CCGCGTCGAC CTAAACCGTC AATTCTTCCC ATCTTAGGTT TCTCTCCTCG    60
GAAGCCTTCT CTTTAGAATC GAACATTTTC TCTTCTGGCT TTGTTCCGAT GGTTCCTGGT    120
CTGTTTCTTT CTGCTCCCT CGTGGCTTTC ACTTCTGTTT TCTTCCCAG AATGACGGTC    180
CTCTCATTG ACCGTGTGCT TTCCGAAGCA CCTGTGCCA CCTGTCTCG GCGATCCCGG    240
TACTCGAG                                         249
```

(2) INFORMATION FOR SEQ ID NO:1339:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 108 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

```
GAATTCGCGG CCGCGTCGAC AAAACAACAC ATTTTAAAGA TTACGTGCTT CTGGTACAG    60
GTTTGTGAAT GACAGTTTAT CGTCATGCTG TTAGTGTGCA TCCTCGAG    108
```

(2) INFORMATION FOR SEQ ID NO:1340:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 652 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GAATTCGGCC	AAAGAGGCCT	AATAGAAGGC	ATTCCATATT	TGTTCAATGA	ATTAACAAAT	60
GTTTTTCATA	TTAATTGTTT	TGATTTTTAC	CTCCTTAGGC	CAGCCTTTAT	TATTGCCATA	120
TAAGCCTTCT	GGTAGTACCA	AGATGTATTA	TGTTCCACAA	TTAAGACAAA	TTCTCCATC	180
TCCGGATTCC	AAATCAGATA	CCACCGTTGA	AAGCTCCCAT	TCAGGATCCA	ATGATGCCAT	240
TGCTCCAGAC	TTCCCAGCTC	AGGTGCTAGG	CACAAGAGAT	GATGALCTCT	CAGCCACTGT	300
TAACATTAAA	CATAAAGAAG	GAATCTACAG	TAAGAGGGTA	GTGACTAAGG	CATCCTTGCC	360
AGTGGGAGAA	AAACCCTTGC	AGAATGAAAA	TGCAGATGCC	TCAGTTCAAG	TGCTAATCAC	420
TGGGGATGAG	AACCTCTCAG	ACAAAAAACA	GCAAGAGATT	CACAGTACAA	GGGCAGTGAC	480
TGAGGCTGCC	CAGGCTAAAG	AAAAAGAATC	TTTGACAGAA	GATACTGCAG	ATTCCAGTGC	540
TGCTGCTGCT	GCAGAGCACT	CAGCTCAAGT	AGGAGACCCA	GAAATGAAGA	ACTTGCCAGA	600
CACTAAAGCC	ATTACACAGA	AAGAGGAGAT	CCATAGGAAG	AACGACCTCG	AG	652

(2) INFORMATION FOR SEQ ID NO:1341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

GAATTCGGCC	AAAGAGGCCT	ACGTGCCATT	TCTCTTCCAC	TATGAGAGGA	CCGATTGTAT	60
TGCACATTTG	TCTGGCTTTC	TGTAGCCTTC	TGCTTTTCAG	CGTTGCCACA	CAATGTCTGG	120
CCTTCCCCAA	AATAGAAAGG	AGGAGGGAGA	TAGCACATGT	TCATGCGGAA	AAAGGGCAGT	180
CCGATAAGAT	GAACACCGAT	GACCTAGAAA	ATAGCTCTGT	TACCTCAAAG	CAGACTCCCC	240
AACTGGTGGT	CTCTGAAGAT	CCAATGATGA	TGTCAGCAGT	ACCATCGGCA	ACATCATTAA	300
ATAAAGCATT	CTCGATTAAAC	AAAGAAAACCC	AGCCTGGACA	AGCTGGGCTC	ATGCAAACAG	360
AACGCCCTGG	TGTTTCCACA	CCTACTGAGT	CAGGTGTNCC	TCAGCTGAAG	AAGTATTTGG	420
TTCCAGCCAG	CCAGAGAGAA	TATCTCNTGA	AAGTGGANTT	GCCAAGGCCA	TGTTAACCAT	480
TGCTATCACT	GCGACTCCTT	CTCTGACTGT	TGATGAAAAG	GAGGAACTCC	TTACAAGCAC	540
TAACTTTCAG	CCCATTGTAG	AAGAGATCAC	AGAAACCACA	AAAGGTTTTT	TGAAGTATAT	600
GGATAATCAA	TCATTTGCA	CTGAAAGTCA	GGAAGGAGTT	GGTTTGGGAC	ATTACCTTTC	660
ATCCTATGTG	AATACTAAGG	AAATGCTAAC	CACCAATCCA	AAGACTGAGA	AATTTGAAGC	720
AGACACAGAC	CACAGGACAA	CTTCTTTTCC	TGGTGCTGAG	TCCACAGCAG	GCAGTGAGCC	780
TGGAAGCCTC	ACCCCTGATA	AGGAGAAGCA	CCTCGAG			817

(2) INFORMATION FOR SEQ ID NO:1342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

GAATTCGGCC	AAAGAGGCCT	AGCACCATGG	ACAACCCACA	GGCTCTGCCA	CTCTTCTTAC	60
TCCTGGGGAT	CCTCACCCCTC	AGAGCCTCTT	CTGGAGCTTCA	GCAAACCAAC	TTCTCCTCTG	120
CCTTCTCTTC	AGACTCAAAG	AGCTCTTCCC	AGGGGCTGGG	TGTGGAAGTT	CCCTCCATCA	180
AACCTCCAG	CTGGAAAGTT	CCAGATCAGT	TCCTGGATTTC	AAAAGCCTCT	GCTGGAATCT	240
CTGATTCCAG	CTGGTTTCTT	GAGGCCCTGA	GTTCCAACAT	GTCTGGGTCC	TTCTGGTCAA	300
ATGTTTCTGC	TGAGGGCCAA	GATTTGAGCC	CGGTTTCCCC	CTTCTCTGAA	ACCCCTGGTT	360

CTGAAGTATT TCCTGATATT TCGGATCCTC AAGTTCCTGC CAAAGACCCC AAGCCTTCCT 420
TCACTGTAA GACCCAGCT TCAAACATTT CTAICTCAAGT CTCCCATCTC CTCGAG 476

(2) INFORMATION FOR SEQ ID NO:1343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 726 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

GAATTCGCGG	CCGCGTCGAC	CAGGAAATGA	AGACATTGCC	TGCCATGCTT	GGAAGTGGGA	60
AATTATTTTG	GGTCTTCTTC	TTAATCCCAT	ATCTGGACAT	CTGGAACATC	CATGGGAAAG	120
AATCATGTGA	TGTACAGCTT	TATATAAAGA	GACAATCTGA	ACACTCCATC	TTAGCAGGAG	180
ATCCCTTTGA	ACTAGAATGC	CCTGTGAAAT	ACTGTGCTAA	CAGGCCTCAT	GTGACTTGGT	240
GCAAGCTCAA	TGGAACAACA	TGTGTAAAAC	TTGAAGATAG	ACAAACAAGT	TGGAAGGAAG	300
AGAAGAACAT	TTCAATTTTC	ATTCTACATT	TTGAACCAGT	GCTTCCTAAT	GACAATGGGN	360
TCATACCGCT	GTTCTGCAAA	TTTTCACTCT	AATCTCATTG	AAAGCCACTC	AACAACCTCT	420
TATGTGACAG	GAAAGCAAAA	TGAACTCTCT	GACACAGCAG	GAAGGGAAAT	TAACCTGGTT	480
GATGCTCACC	TTAAGAGTGA	GCAAACAGAA	GCAAGCACCA	GGCAAAATTC	CCAAGTACTG	540
CTATCAGAAA	CTGGAATTTA	TGATAATGAC	CCTGACCTTT	GTTTCAGGAT	GCAGGAAGGG	600
TCTGAAGTTT	ATTCTAATCC	ATGCCTGGAA	GAAAACAAAC	CAGGCATTGT	TTATGCTTCC	660
CTGAACCATT	CTGTCATTGG	ACTGAACTCA	AGACTGGCAA	GAAATGTAAA	AGAAGCACCA	720
CTCGAG						726

(2) INFORMATION FOR SEQ ID NO:1344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GAATTCGGCC	AAAGAGGCCT	AGGGACAGCA	ATCAAGTTCT	AATGGTGCTC	ACTTTTTAGG	60
TCACCTTCAT	CACAGACTGC	TCCAAAGGCA	GAGCAATGTG	GAACGAACCA	GCACATTTAC	120
TTAAGATCAA	AGTATGATAC	ATCTCTTTGA	GCGCCTCACT	TCACAATAGG	GATCCATTCA	180
TTGGCTTCCA	GATGATGTTT	ACAGTTTCATG	TAACACTGAT	ACTGACTTTG	TTCCTTATGT	240
TTAGACAGCT	TCTCTGTCTA	TACTTCTCAG	AAACACCATC	AACCAGAACA	GAGCCACTTA	300
TTATCCACAA	AAGTTGCATC	AACCAGCTTA	CCTTCTGGGA	GGGATGGATG	GTACCCAAAT	360
ACTCAAACCTG	AATCCTATAG	TGTGGAGCAA	CCAAACAGAA	AACAGTCCAA	GGATTTCAGGA	420
AATGGTAAAA	ACATTTTAAA	TCTAAATAGT	AGTTATTTTC	ATTTTGTTC	GCTCCACCT	480
CGAG						484

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

GAATTCGCGG CCGCGTCGAC ATGAGTTTAA TTTTTTTTTT TTTTTTTACA CTTTACATAG	60
AAATAGGATT ATGTGGGCTG GGCACAGGGA CTGACGCCTG TAATCCCAGC ACGTGGAGGC	120
TCGAG	125

(2) INFORMATION FOR SEQ ID NO:1346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

GAATTCGGCC AAAGAGGCCT AGACCCAGCG TACATACTGA ATGATCTCTA CATCTCAGAC	60
TACTGTGTGT GGATTCAGAA AGTCAAATCC AAAAAGTTGG CAGCTCTTGC AGAAGCCTTA	120
AAGGAAGTCT CCCTTACAAA GGCCCAGCTG GGGTTAGAAC TGGAAGAACT AGAAGCAGCA	180
GCACTGCTTG TCCAGGAGGA AGAACTGCA TTAAAAGCAG CCCATTCACT TTCTGGGCAG	240
CAGACACTTT GCTCCAGCTC TGAGGCAAGT GATTCGGAGG ACTCAGACAG CAGCGTGTC	300
TCTGGAAACG AAGACTCAGG CTCAGATCA GAACAAGATG AACTCAAAGA TAGTCCATCT	360
GAGACAGTCA GTTCTTTGCA AGGTCCCTTT CTTGAAGAAA GCAGTGCCTT TCTTATTGTT	420
GATGGTGGAG TACGCAGAAA CACAGCCATC CAGGAGTCTG ATGCCAGTCA GGGAAAGCCA	480
CTTGCCCTCT CCTGGCCTCT TGGAGTGTCT GGGCCTCTGA TAGAGGAGCT TGGGGAACAA	540
CTGAAGACTA CAGTTCAGGT TTCTGAACCC AAGGGCACCA CTGCTGTAAA CCGCAGCAAT	600
ATTCAGGAGA GAGACGGCTG TCAGACACCA AATAATTGAC TCTTAGGTGG TTTTATTCAT	660
TGTTGAGAAA TATGGTAGAT TGGGTTTCAT TTACCGAATG AGAATTCCTC ATTTTCACTT	720
TGTAATTTTT CTTAGTATAT AGTCAGCCCA CACTCTCGAG	760

(2) INFORMATION FOR SEQ ID NO:1347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

GAATTCGCGG CCGCGTCGAC CATTTGAGA GTCCGTCTTG TAAATGTTTG GCACTTTGCT	60
ACTTTATTGC TTCTTTCTGG CGACAGTTCC AGCACTCGCC GAGACCGGCG GAGAAAGGCA	120
GCTGAGCCCG GAGAAGAGCG AAATATGGGG ACCCGGGCTA AAAGCAGACG TCGTCCTTCC	180
CGCCCGCTAT TTCTATATTC AGGCAGTGGA TACATCAGGG AATAAATTCA CATCTTCTCC	240
AGCGGAAAAG GTCTTCCAGG TGAAAGTCTC AGCACCAGAG GAGCAATTCA CTAGAGTTGG	300
AGTCCAGGTT TTAGACCGAA AAGATGGGTC CTTCATAGTA AGATACCTCG AG	352

(2) INFORMATION FOR SEQ ID NO:1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

GAATTCGCGG	CCGCGTCGAC	TCTAGGTTTT	CTGATTTTGA	TGGTAATATG	GTATTCTGGG	60
AAATATCTGT	CCAAATTATC	CTGATCTCTG	AACTCTGCT	GTTGAGGTCA	GTCACTTCAC	120
ACAATACCAT	GATGACAGCT	TTATCAAGCC	AGATGCTTAG	TCAGAGCTTT	CCAAGACCCA	180
GCTTTGGTTT	TATCAGCAAA	ATCCATCCTT	CCCACCCCC	ATACACACGC	CAGTTTGAGA	240
CTCCTCTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

GAATTCGCGG	CCGCGTCGAC	CTAAACCGTC	GATTGAATTC	TGGACCTCCT	GTGCAAGAAC	60
ATGAACCATC	TGTGGTTCCT	CCTTCTCCTG	GTGGCAGCTC	CCAGATGGGT	CCTGTCCCAG	120
GTGCAGGTGC	AGCAGTCGGG	CCCTAGACAG	GTGAAGCCTT	CGGAGACCCT	GTCCCTCAGT	180
TGTACTGTCT	CTCTCGGCGC	CATGAATGGT	CATTACTGGA	CCTGGATCCG	GCAGACCCCG	240
GGAGGGAGAC	TGGAGTGGAT	TGGATCTGTC	TATTATAATG	GAAACAGAGT	GTATCACCCC	300
TCCTCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

GAATTCGCGG	CCGCGTCGAC	AATTACTACC	ATTGTTAAGT	GTCTCTTTAA	CTAAACTCAT	60
TGTTTAAAG	TTTCTCCCT	CTCTGTTTCT	AAATCCAAAT	TTCTGCTCTG	GAATATATGT	120
TAGAAGAGAT	ACATTTGTTG	GAATGTTTGC	ATTTCTTTTA	TGAAATGCAG	TATCTTTTGG	180
GGAATATTAT	GTAAATGAAA	TACCAATTAT	TTTAAAGAG	CATTTTGTG	TGACATAGTG	240
CTTTCACAAA	CTAAACTGG	AATTTCTTTC	TTTAGTCTAT	CTATATCTTT	TGAAATGTT	300
GACACAGCTA	AGAAGAAGCT	GCCTGTTTCAT	ATCTTAGATG	GTCTGACCCT	CAGCTACAAG	360
GTATATGCTG	ATATTCCTTG	TATGAACCGT	GTTTTCTGCT	AACATTAAAA	CATGCAAGTA	420
ATTGGTTACT	TTCTAATTTT	GTTTTTGTTT	CATAGGTCCC	ATGGCCCGTG	GACATTGTTA	480
TAAGTTTGG	ATGTCAAAAA	ATTTATAATC	AAGTGTTCCT	TCTCTTATTG	CAAATAAAGT	540
GGGCATCCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

GAATTCGCGG	CCGCGTCGAC	TTTATTTTCAG	TGGATTCTCT	AGGATTTTCT	ATATAAAAGA	60
TGTCATCTGA	TAGAGTAGTT	TACTTCTTCG	TTTCCAACCT	GAATGGCTTT	TATTTTCATCT	120
CTTTCCTAAC	TGTCCTGGCT	AGAACCTCCT	TTACCACGTT	GAATGGAAGT	GGCAAGAATG	180
AACATCCTTG	TCTTGTTTCT	GATTTCGAG				209

(2) INFORMATION FOR SEQ ID NO:1352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

GAATTCGCGG	CCGCGTCGAC	AATGGCTTTT	CTTCCTTCCT	GGGTTTGTGT	ACTAGTTGGT	60
TCCTTTTCTG	CTTCCTTAGC	AGGGACTTCC	AATCTCTCAG	AGACAGAGCC	CCCTCTGTGG	120
AAGGAGAGTC	CTGGTCAGCT	CAGTGA CTAC	AGGGTGGAGA	ACAGCATGTA	CATTATTAAT	180
CCCTGGGTAT	ACCTTGAGAG	AATGGGGATG	TATAAAATCA	TATTGAATCA	GACAGCCAGG	240
TATTTTGCAA	AATTTGCACC	AGATAATGAA	CAGAATATTT	TATGGGGGTT	GCCTCTGCAG	300
TATGGCTGGC	AATATAGGAC	AGGCAGATTA	GCTGATCCAA	CCCGAAGGAC	AAACTGTGGC	360
TATGAATCTG	GAGATCATAT	GTGCATCTCT	GTGGACAGTT	GGTGGGCTGA	TTTGAATTAT	420
TTTCTGTCTT	CATTACCCCT	TCTTGCTGCG	GTTGATTCTG	GTGTAATGGG	GATATCATCA	480
GACCAAGTCA	GGCTTTTGCC	CCCACCCAAG	AATGAGAGGC	TCGAG		525

(2) INFORMATION FOR SEQ ID NO:1353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

GAATTCGGCC	TTCATGGCCT	AGGCTCCTAA	AATAAATAAT	CCACATAATT	GTAAATGAAA	60
CACATCAAGG	ATTTGAGTTA	ATAGCCTCTG	AGCAGCATTA	ATATAGCCAT	TAGACTGGAG	120
TATTTGTTAT	CAAGAGGGCC	AGAGAACCCA	CCGCTAAAGC	CGTAGGGTGG	GAGGAACCCCT	180
GGATTGCAGC	TACATGGCTT	ATGTAGGGAG	TTTGTAACAG	CCCCAAGCTG	AAACCAGCTT	240
CTACACCCAT	GACTGTTGAG	TGATTGAATT	CTAGACCTGC	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:1354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

```

GAATTCGCGG CCGCGTCGAC CAACAAGAGC ACTGGCCAAG TCAGCTTCTT CTGAGAGAGT   60
CTCTAGAAGA CATGATGCTA CACTCAGCTT TGGGTCTCTG CCTCTTACTC GTCACAGTTT   120
CTTCCAACTT TGCCATTGCA ATAAAAAGG AAAAGAGGCC TCCTCAGACA CTCTCAAGAG   180
GATGGGGAGA TGACATCACT TGGGTACAAA CTTATGAAGA AGGTCTCTTT TATGCTCAAA   240
AAAGTAAGAA GCCATTAATG GTTATTCATC ACCTGGAGGA TTGTCAATAC TCTCAAGCAC   300
TAAAGAAAGT ATTTGCCCAA AATGAAGAAA TACAAGAAAT GGCTCAGAAT AAGTTCATCA   360
TGCTAAACCT TATGCATGAA ACCACTGATA AGAATTTATC ACCTGATGGG CAATATGTGC   420
CTAGAATCAT GTTTGTAGAC CCTTCTTTAA CAGTTAGAGC TGACATAGCT GGAAGATACT   480
CTAACAGATT GTACACATAT GAGCCTCGGG ATTTACCCCT ATTGATAGAA AACATGAAGA   540
AAGCATTAAG ACTTATTCAG TCAGAACTCG AG                               572

```

(2) INFORMATION FOR SEQ ID NO:1355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

```

GAATTCGCGG CCGCGTCGAC TGAAAAGTAG GTTTTTGAAG AGATATATTC GAAATATATT   60
TTTTCACTTG AAAAAAGTAA AAATTTTTTT CAAAAGCAAA TAATTCAACT CTAAAATTAT   120
ACTATTTCAA CATTCTCATT TATGTGAAAG CATGTGATAA ATTGTTGCTG CGTCAGAGAT   180
ATGAGAAACT CCTTGCATT AGGTGGGCAT TATTCATAGA CTTCTACATG AAAGAGAAGA   240
GAAATAAAAG ATGCACCAGG ATTCTCGAG                               269

```

(2) INFORMATION FOR SEQ ID NO:1356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

```

GAATTCGCGG CCGCGTCGAA CCCAGCAAAA TGGGGATCTC CACAGTCATC CTTGAAATGT   60
GTCTTTTATG GGGACAAGTT CTATCTACAG GTGGGTGGAT CCCAAGGACT ACAGACTACG   120
CTTCACTGAT TCCCTCGGAG GTGCCCTTGG ATACAACTGT AGCAGAAGGT TCTCCATTTC   180
CCTCGGAGTT GACCCTGGAG TCAACTGTAG CAGAAGGTTT TCCGATTTC TGGAGTCAA   240
CCCTGGAGTC AACTGTAGCA GAAGGTTCTC TGATTCCCTC AGAGTCAACC CTGGAGTCAA   300
CTGTAGCAGA AGGATCTGAT TCTGGTTTGG CCCTGAGGCT GGTGAATGGA GATGGCAGGT   360
GTCAGGGCCG AGTGGAGATC CTATACCGAG GTCCTGGGG CACCGTGTGT GATGACAGCT   420
GGGACACCAA TGATGCCAAC GTGGTCTGTA GGCAGCTGGG TTGTGGCTGG GCCATGTCAG   480
CTCCAGGAAA TGCCTGGTTT GGCCAGGGCT CAGGACCCAT TGCCCTGGAT GATGTGCGCT   540
GCTCAGGACA CGAATCCTAC CTGTGGAGCT GCCCCACAA TGGCTGGCTC TCCATAACT   600
GTGGCCATGG TGAAGATGCT GGTGTTATCT GCTCAGCTGC CCAGCCTCAG TCAACACTCA   660
GGCCAGAAAG TTGGCCTGTC AGGATATCAC CACCTGTACC CACTAGACTC GAG           713

```

(2) INFORMATION FOR SEQ ID NO:1357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 925 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

```

GAATTCGGCC AAAGAGGCCT AGAATAATGC ATATACTGCC ATGTCAGATT CCTACTTACC      60
CAGTTACTAC AGTCCCTCCA TTGGCTTCTC CTATTCTTTG GGTGAAGCTG CTGGGTCTAC      120
GGGGGGTGAC ACAGCCATGC CCTACTTAAC TTCTTATGGA CAGCTGAGCA ACGGAGAGCC      180
CCACTTCCTA CCAGATGCAA TGTTTGGGCA ACCAGGAGCC CTAGGTAGCA CTCCATTCT      240
TGGTCAGCAT GGTTTTAATT TCTTTCCAG TGGGATTGAC TTCTCAGCAT GGGGAAATAA      300
CAGTTCTCAG GGACAGTCTA CTCAGAGCTC TGGATATAGT AGCAATTATG CTTATGCACC      360
TAGCTCCTTA GGTGGAGCCA TGATTGATGG ACAGTCAGCT TTTGCCAATG AGACCCTCAA      420
TAAGGCTCCT GGCATGAATA CTATAGACCA AGGGATGGCA NCACTGAAGT TGGGTAGCAC      480
AGAAGTTGCA AGCAATGTTT CAAAAGTTGT AGGTTCTGCT GTTGGTAGCG GGTCCATTAC      540
TAGTAACATC GTGGCTTCCA ATAGTTTGCC TCCAGCCACC ATTGCTCCTC CAAAACCAGC      600
ATCTTGGGCT GATATTGCTA GCAAGCCTGC AAAACAGCAA CCTAAACTCA AGACCAAGAA      660
TGGCATTGCA GGGTCAAGTC TTCCGCCACC CCCGATAAAG CATAACATGG ATATTGGAAC      720
TTGGGATAAC AAGGGTCCCG TTGCAAAAGC CCCCTCACAG GCTTTGGTTC AGAATATAGG      780
TCAGCCAACC CAGGGGTCTC CTCAGCCTGT AGGTCAGCAG GCTAACAATA GCCCACCAGT      840
GGCTCAGGCA TCAGTAGGGC AACAGACACA GCCATTGCCT CCACCTCCAC CACAGCCTGC      900
CCAGCTTTCA GTCCAGCAAC TCGAG                                         925
  
```

(2) INFORMATION FOR SEQ ID NO:1358:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 172 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

```

GAATTCGCGG CCGCGTCGAC AAATAAACCC AGCAACTTCA TTCATTTGCC TTATGTTTAT      60
TGAGGGCCTG CTAGTGCTGG GCACTGTTCT AGGCCCTGGG AATTTATTAG TGAGCAAAAC      120
AGCAAAATCT CTGTCTCAT GGAGCTCACA ATATAGTAGG GAACGACTCG AG              172
  
```

(2) INFORMATION FOR SEQ ID NO:1359:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 770 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

```

GAATTCGGCC AAAGAGGCCT AAGTCAGTGA GGTGGAGTCC GTTTTTGAGG TCACGCGGCT      60
AGTAATTGGA GCCTGGTTTA GAACCAAGTC AGTCTCATT CAGAATCCAG AACCAGTGAT      120
TTGTAAGTGA TGCACTTGTC TCCAAAGGGA TCCAGCACTG GGTTTTCTCA TTTTAAATGC      180
ATCCATTCTT TAAAGCCTCT GTTCACAGTC ACAAGGTGTA CTTTTTAAAG GAACACAGCA      240
CACAAATGTG ACCGCTAGTG GACAGCAGTG GCAGCCAGT TGGATGGCAG AGCCTGGCAT      300
  
```

```

GCCGACTGGG ACAGAAGCCC CAGCACACGG TGTGATGATG GCGTCTCCAG GCTGACCTCC 360
ATGGCCTCAG GAATCAAAGT CCTCGGTCTC TTTCACGCGG GGTTCAGAAA GAAAACTCGG 420
CTATCTTACA TCTCCTCTCC CCTGTTTATT TGAATAAGT GAAGTTCATG TGGCTTGAGC 480
CTCGTTTCTT GGGGAAATCA GCCTGGCTTA GGATTCCATT GTCTTCTGGG ACTGGGAAGA 540
TGTGGAAGGC TGACCTCACG CCCAGCTGAA GGTCACCTTC CCAGACTCTG AGCTCGGCTG 600
CCTTCTGCAT CGCCACGGCT GGAGGGCCTG GCCCAGGCCG TGGCTGCATG CTGGCTTTCC 660
ACTGTCTCGG TGTCCCTGCT GCCTGTCAGT AATGTGCCCC GCACCTTCTG GTGTCATGTC 720
CCCTCTTGTT TGTGATTCTT TTCCTGAGCT AGTCCATTTT CTACCTCGAG 770

```

(2) INFORMATION FOR SEQ ID NO:1360:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 505 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

```

GAATTCGGCC AAAGAGGCCT ACTCAGTGA AACCTTTAAA CCCTAAAATC CAGGAAAAGA 60
AAATAAATAC ATTATCATGG ACCTGAGGGA TTTTACCTG TTGGCTGCTC TGATTGCCTG 120
TTTAAGGCTG GATTCCGCAA TAGCTCAAGA ACTTATTTAC ACTATTAGAG AGGAATTGCC 180
TGAAATGTG CCCATAGGAA ACATACCAAA GGATCTGAAC ATTTCTCACA TCAATGCTGC 240
CACAGGGACC AGCGCCAGCC TTGTCTACAG ACTGGTTTCT AAAGCTGGGG ATGCCCTTT 300
GGTGAAGTA TCCAGCAGCA CTGGGGAAT TTTCAACACC TCCAACAGAA TAGACAGAGA 360
AAAACCTCTG TCTGGCGCCT CATATGCTGA GGAGAATGAG TGTTCCTTTG AACTTGAGGT 420
GGTGATCCTC CCAATGATT TCTTCAGGCT GATCAAAATA AAAATAATTG TCAAGGATAC 480
CAATGATAAT GCCCCAATC TCGAG 505

```

(2) INFORMATION FOR SEQ ID NO:1361:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 553 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

```

GAATTCGGCC AAAGAGGCCT AAATTGTTC TCTCAAACC AGAAGACCTT AGGTACAGAT 60
GACCCACAGG AGCTGGGACA GCAGGACAGA NAGGGGAAGG GACAGGTCCA TATATAGGTG 120
TGTCATTGCA GCCACTGCAA TGAACATAAC ATGCAAGAAA TGTACAGAAT GTGGTCCAGA 180
ATTGCCCACT GGTGTCCTGT GCCCTGGTGG ACCCCACAGA GGAAGTCCCC AGGCTTTCAC 240
TTTCCTTCCC CATGGATTGA GCAAGTCCC AGGGCAGGAT GGGTGGCCAG GAGGGGCAGA 300
ACGCTGGCGG GGACGGGGAA GCCAAGTGCT CACAGGACCA TCCACCACAG CTGCAGCCAC 360
ACTGCAAGAC GGCGGGGATG GGACACACGG TCTAGTTCTT AGTTCTGCCT CCTACAGGCA 420
GCCCCTGCTG TCACTCCAGA ACTAATTCTC TGTGTGCCAC TCACTCGCGT GTGTGACACA 480
CAACAGATAC ACATACATAG ACACATACGT ACATCTCCTC CCCCAATCTC ACCCTCTCAC 540
CACGCCCTC GAG 553

```

(2) INFORMATION FOR SEQ ID NO:1362:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 855 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

```

GAATTTCGGCC AAAGAAGCCT AGTCAACTTG ATCCAAACCT GTTGGTGAAG CAGCAGACTC      60
CACCATCTCA GCAGCAGCCA CTCCATCAGC CAGCCATGAA GTCTTTCCTT GACAATGTCA      120
TGCCCCACAC TACACCTGAG CTGCAAAAAG GGCCATCACC AATAAATGCT TTCAGCAACT      180
TCCCTATAGG CTGAACTCA AACTTGAATG TAAATATGGA TATGAACAGT ATTAAAGAGC      240
CACAGTCCAG ACTAAGGAAG TGGACGACAG TGGACAGCAT TTCTGTGAAC ACATCTTTGG      300
ATCAAACTC CAGCAAACAT GGTGCTATTT CAAGTGGTTT CAGGCTGGAA GAGTCTCCAT      360
TTGTNCCCTA TGACTTTATG AACAGCAGTA CTTCAACAGC CAGTCTCCA GGTTCATAG      420
GAGATGGCTG GCCACGTGCC AAATCGCCTA ACGGCTCTAG CAGTGTTAAT TGGCCACCAG      480
AATTTTCGTCC CTGGTGAGCC ATGGAAGGT TATCCAAACA TTGACCCTGA AACTGACCCCT      540
TACGTCACTC CTGGCAGTGT CATAACAAT CTTTCAATTA ATACTGTGCG GGAAGTTGAC      600
CACCTCAGGG ACAGGAACAG TGGGTCACTC TCATCCTTGA ACACCACGCT GCCTTCAACT      660
AGTGCCTGGT CATCCATTCG TGCCTCCAAC TACAACGTTT CCCTCAGCAG TACAGCACA      720
AGCACTTCAG CCAGAAATAG TGATTCCAAA TTGACATGGT CTCCTGGTTC AGTTACAAAC      780
ACCTCTCTGG CTATGAGCT GTGGAAGGTC CCTTTGCCAC CTA AAAACAT CACTGCTCCG      840
TCCCGCCACC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 646 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

```

GAATTTCGGCC AAAGAGGCCT ACAAAAAGTA CATAGTAAGA CTAAGATACC AAGTTGTATA      60
CTAATATTTT TCAGGCCTTG GGCCTCAAAT ATATATATTT ATATATAATA CTCCAGTGTG      120
AACAGCAATT CGATGAAATG TAAATGTAT CTTTTTTTTT TTAAATCACA CACAAGTATT      180
CATAACCACA GGGTTCACCA GAAATCTAAA GCAAGGAGAC ACTCACTCAT ATAGAAATGG      240
AGTTACTCTT CCACAGATCG TTCTGATCAA AGGTTTTTGA ACAGAAATGA ATTAATGATT      300
TTTTTGTATA ATATCCAACA TGTCCACTAT CAAATACATT TAGTATGAAA AAACAGATGA      360
AGAAAAGGAA CATACTTAG GACAAAGTAT CTGGTTAAAA TGCTGTTTAT TTAAATAAAG      420
CCCACTCTCC TTACTTTAGA GCTCCTTGGT GAAATGGAGG TGAGTTTGAT GGAGTGCAGT      480
TGATGACCAC TGAAAAACAC GAGCCCTTTC AACAAATGTT CAACACTGTT AGTTTTTGGT      540
TTAAACACAC ACACACACTC ACAAATGCTA AGTGTACACT ACCAAATTCT GCGGTCAGCT      600
TTTCCAAGAA CTACTGGGGA AAGTTTCAAT GCTGCAAATC CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

```

GAATTTCGGCC TTCATGGCCT AATGGCTTAG CTGAAGGAAA TGCTCCAGAA ATTGGACTGT      60

```

```

GTAAACCATC AGTACAATAA TACGCTGTGT ATGTATGTGT ATATAAAATG AGAATTATGG      120
CATAATTGGA GCATTTGCAT TAATCAACAA ACTCACATTG AGACAAAACCT TAGTTTTACA      180
GCTGTCTTGA TTAAAGCCAA GTGTTCCATG TTGCTGTGAA GAATAGCCTC TTTCAAATAC      240
TTTGAAAAGT AGTTACTTGG AAACCTGTAA AGGTATTACA TTTTATATT TAAACACCTA      300
TAGAGATCTT CAATTCCTTG AGTCTGAGCT TGTGGGTGGA ATTCTAAATT TGTATCATAA      360
TCTGTCTTTT GTGAAACATT TTGAAAATAT GTATATATAA TATTGTATAT GCAAATTGTG      420
TTGTTTCACT TGTAAGGGA AAAGGCTTAT TTTTCTTTAT ATTTCTGATA ACTTGTTTTG      480
CATATGACCG GCACTTCTCG AG                                         502

```

(2) INFORMATION FOR SEQ ID NO:1365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 197 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

```

GAATTCGGCC TTCATGGCCT ACAGAAGTAC GGAAGGCGA AGAAAAGAAAT AGAGAAGATA      60
GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAAA GATAAATTTA AACCTGAAAA      120
GTAGGAAGCA GAAGAAAAAA GACAAGCTAG GAAACAAAAA GCTAAGGGCA TCGATTGAAT      180
TCTAGACCTG CCTCGAG                                         197

```

(2) INFORMATION FOR SEQ ID NO:1366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

```

GAATTCGGCC TTCATGGCCT AGGCCTGGGG TGGGACATT TGTGTGTGAG AAGCCTGGAC      60
AAGAGGACGA GGTGCACACC ATGTCACTCA CGGATTTGTG AACTCACAGG AGAGGGTTGG      120
ATAGGGCGTG TGAACGTGAG CCCCGGTGTG AGACGATGTG AAGCTGTGGT AACGGGTGGG      180
CTTGTGATGG CACCCGCTGC TCGCAGGAGA GGGTTGGATA GGGCATGTGA ACGTGAGCCT      240
GCAATGTAGA CGATGCGAAG TCGTGGAAC GGGTGGGCTT GTGACGGCAC CCGCTGCTTG      300
CAGCCTAACT CGAG                                         314

```

(2) INFORMATION FOR SEQ ID NO:1367:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

```

GAATTCGGCC TTCATGGCCT ACTGGTCCCA TTTTCTATT GCAGTGGTCA TCATTTTAT      60
TGATGTATAA TAATATTGTA TCATAAATCT TCATAATATG TGCTTCCAAA GTTTTTCTA      120

```

```

ATTTTTCAC T AACCTTTGAT TTGGTATTTA ATTTT TAGTT GTCAGAAGTT TTTAATATTT 180
GTATCATCAA AGCTATCAGG TTATTAAAAT TGACTTCTCA TTTAGACATA CTTAGGCCAT 240
GAAGGTCGAG 250

```

(2) INFORMATION FOR SEQ ID NO:1368:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

```

GAATTCGGCC TTCATGGCCT AGTGAGAGCA CCACACAAAG GACAGGAAAA ACACCAGCAA 60
TACATCAGCT TTACACAGCA GGCAAGTTTC CTGCTCTCTA CAAGTACAGA TGGAACTTGT 120
CTTGTGAATT AACATCCTGA CTACTTTTCT TGATCATCAC ATTTTTCCT CATGAGAGAA 180
ATAATAGTGT TTTATAGGCT CCTGAGAA TA GGTTTACTAA AGTCATCGAG ATCTGGGTTC 240
AAATGACACT TCATGCTCGA G 261

```

(2) INFORMATION FOR SEQ ID NO:1369:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 408 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

```

GAATTCGGCC TTCATGGCCT AGTTTGTGTT TGTTTGTGTTG TTTGTTTTTT GGCAAGAACA 60
GTTAGGAACC AGATCACAGT GAGGTATAGA GTGAATGAGA GTTGAGAATG TAAAGACAAT 120
GGATATAGAT CACTATTTCG GGAAGCTGTT TGTGAGAGGG AGGAGAAAAA TAAACAGTT 180
ACTGAGCAAT AGGGTGGTTG GTAAGGGGGA GGGATTTTTT TCTGAAAGAT GGGAGAAATT 240
TTAACATACT TAAATTTGAT GGGATAAGCC ATGCATTAT AGGCATTCA TCAATATATA 300
TTTCACAAAT GAATGAAGAT AAATTAGGGA GAGGTTAATT GGAGATTTTA GGAGAGAGGG 360
AATAATTGAT CATGTAAAGT CATTGATAAG GTGGGAGCAG AACTCGAG 408

```

(2) INFORMATION FOR SEQ ID NO:1370:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 369 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

```

GAATTCGGCC TTCATGGCCT ACTCGATTAC AGGTCTCCCG CCTGCCATGC AGAAAGTCAT 60
GTATAAGGGA CTCGTCCCCG AGGATAAAAC ATTGAGAGAA ATAAAAGTGA CCAGTGGGGC 120
CAAGATCATG GTGTTGGCT CCACCATCAA TGATGTTTA GCAGTAAACA CACCCAAAGA 180
TGCTGCGCAG CAGGATGCAA AGGCCGAAGA GAACAAGAAG GAGCCTCTCT GCAGGCAGAA 240
ACAACACAGG AAAGTGTGG ATAAAGGAAA ACCTGAAGAT GTGATGCCAT CTGTTAAGGG 300

```

GGCCCCAGGAG CGCCTGCCAA CGGTACCGCT GTCCGGCATG TACAATAAAT CTGGAGGAAA 360
AGTCTCGAG 369

(2) INFORMATION FOR SEQ ID NO:1371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTAACTG ATAGATGGTG CAGCATGTCT 60
ACATGGTTGT TTGTTGCTAA ACTTTATATA ATGTGTGGTT TCAATTCAGC TTGAAAAATA 120
ATCTCACTAC ATGTAGCAGT ACATTATATG TACATTATAT GTAATGTTAG TATTTCTGCT 180
TTGAATCCTT GATATTGCAA TGGAAATCCT ACTTTATTA ATGTATTTGA TATGCTAGTT 240
ATTGTGTGCG ATTTAACTT TTTTGTCTT CTCCCTNITT TTGGTTGTGC GCTTTCTTTT 300
ACAACAAGCC TCTAGAAACA GATAGTTTCT GAGAATTACT GAGCTATGTT TGTAATGCAG 360
ATGTACTTAG GGAGTATGTA AAATAATCAT TTAAACAAAA GAAATAGATA TTAAAATTT 420
AATACTAAT ATGGGATCTC GAG 443

(2) INFORMATION FOR SEQ ID NO:1372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 770 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

GAATTCGGCC AAAGAGGCCT ACTTCCGGCT GGAGCTGCTG GCGCGGGAC CTGGGGCGGT 60
TAATTTGGAG TGGCCCCCTGG AGTCAGTTTC CTACACCATC CGAGGCCCCA CCCAGCACGA 120
GCTACAGCCT CCACCAGGAG GGCCTGGAAC CCTCAGCCTG CACTTCCTCA ACCCTCAGGA 180
AGCTCAGCGG TGGGCAGTCC TAGTCCGAGG TGCCACCGTG GAAGGACAGA ATGGCAGCAA 240
GAGCAACTCA CCACCAGCCT TGGGCCCCAGA AGCATGCCCT GTCTCCCTGC CCAGTCCCCC 300
GGAAGCCTCC AACTCAAGG GCCCTCCACC TGAGGCAGAT CTTCTTAGGA GCCCTGGAAA 360
CTTGACGGAG AGAGAAGAGC TGGCAGGGAG CCTGGCCCCG GCTATTGCAG GTGGAGACGA 420
GAAGGGGGCA GCCCAAGTGG CAGCCGTCCT GGCCAGCAT CGTGTGGCCC TGAGTGTTC 480
GCTTCAGGAG GCCTGCTTCC CACCTGGCCC CATCAGGCTG CAGGTCACAC TTGAAGACGC 540
TGCCTCTGCC GCATCCGCCG CGTCCTCTGC ACACGTTGCC CTGCAGGTCC ACCCCCACTG 600
CACTGTTGCA GCTCTCCAGG AGCAGGTGTT CTCAGAGCTC GGTTCCTCCG CAGCCGTGCA 660
ACGCTGGGTC ATCGGACGGT GCCTGTGTGT GCCTGAGCGC AGCCTTGCCT CTTACGGGGT 720
TCGGCAGGAT GGGGACCCTG CTTTCCTCTA CTGCTGTCA GTCCTCGAG 770

(2) INFORMATION FOR SEQ ID NO:1373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

GAATTCGGCC	AAAGAGGCCT	AGTCTCTTGG	AAGATCTCTA	GGAACCTTGCT	TTATGAATCT	60
TCATGCTCCT	GTGTTGGATG	CATATACATT	TAGGATAGTT	AGGTGTTCTT	TTTGAATTGA	120
AACCTTTTACC	ATTATGTAAT	GCCCTTGTTT	GTCTTTTAAA	ATTTTGTGTTG	GTTTAATATC	180
TGTTTTGTCT	AAAATTAGAA	TTTCAGCCTC	TGCTTTTTTT	CTGTTTTCCA	TTTGCTTAAT	240
AAATTTTTTCT	TCATTCCCTT	ATTTTTAGCC	TATGGGTGTC	ATTGGATGTG	AGATTTCATCT	300
CTTGAACACT	GTACTIONTGG	TTCTTGCTTT	TTTACTCAGC	TTGTCACTCT	GTGCTCTTCA	360
ATTGGGCATT	CAAGGCTAGT	GTTGATATGT	GTGAATTTGT	TTCTGTCTATC	ATGTTATTAG	420
TGTTTTATTA	TGCTGACTTG	TTGTGTGGT	TTTNTTATAG	TGTTACTGGT	CTGTGCACCTT	480
AAGTGTGTTT	TTTTAGTAGC	AATATTTTCT	TTTCATATGT	AGTGCTTTAT	GCGAGGTATT	540
TTGCAAGGAT	TTTCTGAATN	NTCNGAATTT	TTATGTGGGC	TAACTAGGG	GCTCGAG	597

(2) INFORMATION FOR SEQ ID NO:1374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

GAATTCGGCC	AAAGAGGCCT	AGCCTCCCAG	TGTGAGCCAC	CGCACCCAGC	CTGGATTGTT	60
GAATTCAATG	CTTGGGTCAC	CTCCAGATTC	ATTTTCACAG	TCTTTCATGT	TTTGGTCATA	120
TGACATTGTA	TTTTGCTGCC	ATATGACTGA	TCTTTTTTTG	TTAAATGTGA	GATACTTGTT	180
AAAAAATGTT	TAGCAATGAA	TTGAGGCCTA	GTAGCATGTT	ATCTTGCTGC	AGAAGAGATG	240
GGAGTCTACT	TCTGGGGGAT	GGTCAGGGGT	CCTCCATACA	GGCTGCAATT	GAAGTCGTCG	300
GTGCAGGCTC	AGTCCCTACA	AAGGCCAGGG	TATTTCTGT	CCACCTTAT	TCTGATGCAT	360
GACTCTTCTG	GGTCTCAACC	AGAGCCAGTG	GACTTCAGTA	TGGGTCGCTT	TCATTGGCAG	420
ACCCCTCAATC	CACTTGTTTT	CCATCTAATC	CCACTCGAG			459

(2) INFORMATION FOR SEQ ID NO:1375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

GAATTCGGCC	AAAGAGGCCT	AATGGATCTC	ATGTGCAAGA	AAATGAAGCA	CCTGTGGTTC	60
TTCTCTCTGC	TGGTGGCGGC	TCCCAGATGG	GTCTGTCCC	AGCTGCAGCT	GCGGGAGTCG	120
GGCCCAGGAC	TGGTGAAGCC	TTCGGAGACC	CTGTCCCTCA	CCTGCTCTGT	CTCTGGTGGC	180
TCCATCAGCA	GCAATAGTTA	CTCCTGGGGC	TGGATCCGCC	AGCCCCCAGG	GAAGGGGCTG	240
GAATGCATTG	GGAGCATCTC	TTACAGTGGG	AGCACCTACC	TCACCCCGTC	CCTCAAGAGT	300
CGAGTCACCG	TTTCCGTAGA	CCCGTCCAAG	AACCAATTAT	CCCTGAGGCT	GAGCTCTGTG	360
ACCGCCGCAG	ACACGGCTGT	GTATTATTGT	GCGGGGGGGT	CTCCGGGCGA	TTATTCTTAT	420
GAGAATAGTG	ATTACCCCGA	CCCCCGTAC	TATTTAGACT	CCTGGGGCCG	GGAACCCCTG	480
GTCACCGTCT	CCTCAGCTTC	CACCAAGGGC	CCATCCGTCT	TCCCCCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:1376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

```

GAATTCGGCC AAAGAGGCCT AATGACTCAG AAGAAAGAAG TTACTTTACC ATTTTGTGTT      60
ACACCATTTA AACTGCTTTC TGATTCCAAA CAGTTCAACA TTTTAAGAAA AGCAAGATCT      120
TATATAAAAC ACAGAAAGTT TGATGAAGTG GTCTCCCTTT GCAAGGAGCT AATTCATCTT      180
GCATTGAAAG GATTGTCCTA TTATCACACA TATGACAGAT TCTTTTGGG CGTCAATGTT      240
GTTATTGGTT TTGTGGGATG GATATCTTAT GCCTCTTTGT TGATCATCAA GTCTCATTCC      300
AACCTTATAA AAGGTGTTAG TAAAGAAGTG AAGAAACCAA GCCATCTCCT GCCTGTAGT      360
TTTGTAGCTA TTGGCATTTC AGTAGCATT TTTCTGCTGA TTCAAGCCTG TCCCTGGACA      420
TATTATGTAT ATGGTTTGTG GCCACTGCCA ATATGGTATG CGGTTCTAAG AGAATTTCAA      480
GTTATTGAGG ACCTTGTTGT ATCAGTGTG ACCTATCCTC TGAGCCATT TGTGGGTAC      540
CTGTTAGCCT TTACCCTGGG AATTGAAGTA TTAGTTCTCA GTTTTTTCTA CCGCTATATG      600
CTTACCGCTG GACTTACTGC CTTTGCAGCT TGGCCATTTC TCACTCGGCT GTGGACTCGA      660
G

```

(2) INFORMATION FOR SEQ ID NO:1377:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 117 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

```

GAATTCGCGG CCGCGTCGAC AAAAAAGGTA AAGATGTTGC TGTATGCAA ATGGACCCAA      60
GTTATGTTTA TTCAAGTTGC CTGTAGAAAC TTAGTGCTCT ATAGCCACAA ACTCGAG      117

```

(2) INFORMATION FOR SEQ ID NO:1378:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 118 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

```

GAATTCGCGG CCGCGTCGAC CTAAATTTA AACTGGCCT GGTTCCTT TTTTATCAAG      60
AGAGCTTAAC AGATAAAAAA TGAAATTAGT CTATTTTCTA CTTGCCAGCA GTCTCGAG      118

```

(2) INFORMATION FOR SEQ ID NO:1379:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 229 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

GAATTCGCGG CCGCGTCGAC ATTTTATATA ATATTTTAAA TAAGTTTGTG TACAAAACAA	60
AGATTGACT GCATTTTGAT TGTGACCCCG TTGCATGAAG TCAGGTGTGG AGTTTCCAC	120
TTGTGGTATC ATGTTGCTGC TGCTAAGAA GTTCTGATT TTGGAACATT TTGGATTTTG	180
GATTTTCACA TTGGGGATAC CTAATGTGAG AGAGACTAGG CCACTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTCGCGG CCGCGTCGAC GTTGGGGACA TGGTGGGTCT GAGAAAAGTG TTGCCCCGAA	60
CTTTCTATCT GGCATTCCCT GCGGAGGAAA TAGAATGCGC GCTCTCCGAC AGCATTTCCT	120
GTAACATCCG CGAACTCGAG	140

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTCGCGG CCGCGTCGAC TCTCAGAAGA GGTTTGTTA ACTTCTATAA ATACAACCAC	60
TTTCATGCGT GGCATCTCCT TGAGAAAAGG CTTCTCGAG	99

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAATTCGGCC AAAGAGGCCT AGTTTAAGTG CTGTGGAGTA GTATATTTC CTGACTGGTT	60
GGAAATGACA GAGATGGACT GGCCCCCAGA TTCTGCTGT GTTAGAGAAT TCCCAGGATG	120
TTCCAAACAG GCCCACCAGG AAGATCTCAG TGACCTTTAT CAAGAGGGTT GTGGGAAGAA	180
AATGTATTCC TTTTGGAGAG GAACCAACA ACTGCAGGTG CTGAGGTTTC TGGGAATCTC	240
CATTGGGGTG ACACAAATCC TGGCCATGAT TCTCACCATT ACTCTGCTCT GGGCTCTGTA	300
TTATGATAGA AGGGAGCCTG GGACAGACCA AATGATGTCC TTGAAGAATG ACAACTCTCA	360

GCACCTGTCA TGTCCCTCAG TAGAACTGTT GAAACCAAGC CTGTCAAGAA TCTTTGAACA 420
 CACATCCATG GCAAACCTCG AG 442

(2) INFORMATION FOR SEQ ID NO:1383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTCGGCC	AAAGAGGCCT	ATTCAGGTGT	TTTCATTTGG	TGATCAGGAC	TGAACAGAGA	60
GAATTCACCA	TGGAGTTTGG	GCTGAGCTGG	CTTTTTCTTG	TGGCTATTTT	AAAAGGTGTC	120
CAGTGTGAGG	TGCAGCTGTT	GGAGTCTGGG	GGAGGTTTAA	TACAGCCTGG	GGGGTCCCTG	180
AGGCTCTCTT	GTGCAGCCTC	CGGGTTCAIC	TTTAGCAACT	ATGCCGTGAG	TTGGGTCCGC	240
CAGGCTCCAG	GGAAGGGGCT	GGAGTGGGTC	TCAAGTATAA	GTGACATTGG	TGACACCAGA	300
TACTACGGAG	ACTCCGTGAG	GGGCCGATTC	ACCATCTCCA	GAGACAATTC	CAAGAACATG	360
TTGTATTTGG	ACATGAACAG	CCTGAGAGCC	GAGGATACGG	CCGTGTATTA	TTGTGCGGCA	420
AGGGATTGGT	ATCATACTCG	TGGCTATTAC	TGGTACTACT	TTGACTTCTG	GGGCCAGGGA	480
TCCTTAGTCA	GCGATCTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:1384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 634 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTCGGCC	AAAGAGGCCT	ACTTCAATAT	TCTGTTACGG	GTTTTTTTAG	TCTTTTTTTC	60
TCTTTGCTTT	CCTGTGTTGG	AATTTTCTAT	TTCTATATAC	TCAAGTTCAG	AGATTCTTTC	120
CTTTTCCATA	TCCTGTCTAC	TAGTGAGCCC	ATCCAAGGCA	TGTTTCATTT	CTGTTACAGT	180
GTTTTGATCT	TTAGTATTTT	TTTTTCATTC	TTCAATTACAC	TTTCTCTCTG	CTAACATTGC	240
CCATAAGTGT	TTATATGCTG	TATACTTTAT	CTGTTGATCA	TATTTGTTTT	AAATTCCTAA	300
TCTGATAATT	CAACATCTCT	GACATGTCTG	GTTCTGGTTC	TGATACTTGT	TGTCAAACCTG	360
TGGTTTTTTT	TCTTTTAGAG	TGGCTTTTAA	TTTTCTTTTT	GTTTTTTGTT	TTTTTTTTGG	420
ATAGTTGGAC	ATGACGTACT	AGATAAAAGC	AACTACTGTA	AATAGACCTT	TAGGAATGTG	480
GTGGTAAGAT	GTGAGAGGAA	GAAAAGCATT	CTGTAGTCCT	GTTAGGTTTC	AGTCTTTTAA	540
CCCATTATG	CTTAGTGTTT	TATTACTGGA	ACGCTAGGCA	TGTGGAAGTT	ATTTATATCC	600
TACTGCTAAA	GGTTATCACC	AAGCTGTACT	CGAG			634

(2) INFORMATION FOR SEQ ID NO:1385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 700 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

GAATTCGGCC	AAAGAGGCCT	ACTCAAGTTC	AAGGAAAATG	AAGACAAAAA	GTGATATGAT	60
GGAAGAAAAAC	ATAGATACAA	GTGCCCAAGC	AGTTGCTGAA	ACCAAGCAAG	AAGCAGTTGT	120
TGAAGAAGAC	TACAATGAAA	ATGCTAAAAA	TGGAGAAGCC	AAAATTACAG	AGGCACCAGC	180
TTCTGAAAAA	GAAATTTGTG	AAGTAAAAAG	AGAAAAATATT	GAAGATGCCA	CAGAAAAGGG	240
AGGAGAAAAAG	AAAGAAGCAG	TGGCAGCAGA	AGTAAAAAAT	GAAGAAGAAG	ATCAGAAAGA	300
AGATGAAGAA	GATCAAAACG	AAGAGAAAGG	GGAAGCTGGA	AAAGAAGACA	AAGATGAAAA	360
AGGGGAAGAA	GATGGAAAAG	AGGATAAAAA	TGGAAATGAG	AAAGGAGAAG	ATGCAAAAGA	420
GAAAGAAGAT	GGAAAAAAAG	GTGAAGACGG	AAAAGGAAAT	GGAGAAGATG	GAAAAGAGAA	480
AGGAGAAGAT	GAAAAAGAGG	AAGAAGACAG	AAAAGAAACA	GGAGATGGAA	AAGAGAATGA	540
AGATGGAAAA	GAGAAGGGAG	ATAAAAAAGA	GGGGAAGAT	GTAAAAGTCA	AAGAAGATGA	600
AAAAGAGAGA	GAAGATGGAA	AAGAAGATGA	AGGTGGAAAT	GAGGAAGAAG	CTGGAAAAGA	660
GAAAGAAGAT	TTAAAAGAAG	AGGAAGAAGG	AAAGCTCGAG			700

(2) INFORMATION FOR SEQ ID NO:1386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

GAATTCGCGG	CCGCGTCGAC	CTTTAGTGTG	TCTTTTCATT	CTCTAAAAAG	TGTCCTTTGC	60
AGAGAAAAAA	AAAATTTTAA	TTTTGATGAA	ATCCAACCTA	TCAATTTTTC	TTCTGTGGCC	120
CCTCGAG						127

(2) INFORMATION FOR SEQ ID NO:1387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

GAATTCGCGG	CCGCGTCGAC	CTCTGTTTCT	TCGTTTTGCT	GAATATTTAT	TAGCATTCCA	60
TCACCTTTGTG	TTTAATTAAT	AGAAGTTGAG	TTCAACAAT	GTTTTTAAAA	TTACACAAAA	120
TACTCGAG						128

(2) INFORMATION FOR SEQ ID NO:1388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 816 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

GAATTCGGCC	AAAGAGGCCT	AGTTTCTTTT	GCTCTACATC	TTCAACAGTA	TTTGGTGTTA	60
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TCAGTGTCTT GAATTTTGTG CATTCTGATA GGTGTGTAGA GGTATCTTAT AATTTTAATT 120
TGTGTTTCTC TGATGCCATA TGATGTGTGG GACATCTTTT CATATGCTGA ATTGCCATCT 180
GTATATCTTT GGTGAGGTGT CTGTTAAGGT TGTGGCCAA TTTTAAATT GGGTTGTTTG 240
TTTTCTTGTG GAATTTTAAG AGTTCCTTAC ACTGTCTCTG TCTGTCTTGT CTGTCTGTCT 300
GTCTGTCTGT NGAGACAGAG CCTCGCTCTG TCACCCAGGT TGCAGTACAG TGGCACAGTC 360
TTGGCTCCCT GCAACCTCTG CCACCTGGGT TCAAGTGATT CTCCTGCGTC AGCCTCCCGA 420
GTAGCTGGGT TTATACCCGT GCACCACCAC ACCTGGCTAA TTTTGTATT TTTAGTAGAC 480
ACGGGGTTTC ACTANGTTAG CCAGGCTGGT CTCGACCTCC TGACCTCAGG TGATCCACCC 540
ACCTTGGCCT CCCAAAGTGC TGGGANGNGA GCCACCACAC CCAGCCTCCT TACACATTTT 600
AGTTAATAGT TCTTTATCAG ATGTGTCTTA TGTAAATATT TCCTCCCTAT CTGTGGCTTG 660
TCTTTTCATA CTCTTGACAT TGTCTTTTGC AAAAGACAAC AATTTTAAAG AAACAAGTAG 720
ACAATTTTAA TGAAGTCTGG CTTATCAGTT CTTTCTTCA TGGTTGGTAC CTTTGGTGCC 780
GTATCTAAAA GTCATCACCA AACCAAGAA CTCGAG 816

```

(2) INFORMATION FOR SEQ ID NO:1389:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 163 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

```

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTC TAGACGAACT ATATGTTTAA 60
GCAAAAACAA AAATAAAAT CCTCAAAAAA AGTAATATCA GAGTTTAAAT TTCAACCAGC 120
TGGCACAACA ATGAAAGTGT CAGACTTTCT GAAAGTACTC GAG 163

```

(2) INFORMATION FOR SEQ ID NO:1390:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

```

GAATTCGGCC TTCATGGCCT AAAACCTCA AAAATAAATT AGAATCCAGC ACTGCTACAA 60
TATATTATCT AAAATGTCTA ATTCTCAAAA ATATGAGTGA TGCAAAGAAA CAGGAAACAG 120
TGAAACACAG AGGAAAAAAC AGTGACTAGA AACTGACTTA AGAGTAAGCC CAGATGTATT 180
TGGGAGCCAG AGCCTTCAAA GTAGCTATTA AATATGTTTCG AAAAAATTAA GGGAAAATAT 240
GACAATGACT CAAAAATAAG GACTCTAAAT ATAGAAATGG GAGCTG 286

```

(2) INFORMATION FOR SEQ ID NO:1391:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 392 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:

```

GAATTCGGCC TTCATGGCCT ACTTTTAAGG GCTTGAAGT TTCAAAACCA CAGTCTGCAT      60
GTGACAGGTG CTCACTGCTG TTGGGTGGC CGCTGGTTCT AGGCCTCTGC TGGAGTGTGT      120
GATCTGCTTT CTGACGGCAG GCGGTTCA CA TGCGTGTGCT TTAATCTTAC GTCTCCGTCC      180
TCTTTTCCA CTGAGAGTGC TGGTCTCAAG GACAGTGGAG ATGAGAGAAT TGGAAATATCG      240
CATAATGTCT CATCTGTTTT ATCTCTTGCT ACAAACATCA CAATCTCAAA ATAACAATGG      300
CAGTACAACT GCCACCTATA TCATTACTGA AAACAGTGAA GATATTTTTT GCCTAAGTCT      360
TCCCATTCTG TGTAGTTATG CAGAGTCTCG AG                                     392

```

(2) INFORMATION FOR SEQ ID NO:1392:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

```

GAATTCGGCC TTCATGGCCT AGTAATCTTT CCCCCAGTT TTTGGATGAA GAAACTAACA      60
CTGAAGGGGC GAGGTGGCCT CCCAGGCTCA GAGGTGATT CAGAATCCAG GCCTGGTGT      120
CCTTCCACAG TACCAGGCG CCACACATTA GTTGTCTTGT AGATTTTCCA CACTTCAGGG      180
AGAATGCCAA AGTATCTTTG CTTGTCACAC ACTACCTGTT CAACACTCAG TGACGAGGGT      240
GTCGTGTGTG CTCAGGCAAC TCCGCCCCTT CTTCCTTTTG CTCGAG                      286

```

(2) INFORMATION FOR SEQ ID NO:1393:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

```

GAATTCGGCC TTCATGGCCT ACTGAGTTCT CAAATCTAAC GTTTTAGGAA TTTTTATTC      60
CTGCAGAGAG TTGGGGAGCT GTTTAAAAGT TGGTTGGTTT AGCCAGTATA GCTAGATTCC      120
TCAAGGTCAA CACAACGCCA TACTGCTCTA GCTGGGGCTA GATTTCATCAT GATAGTCTAA      180
ACTGTGTGAT GGCCAAGTCC CCACTTTGAA GATGTCCAAA TTCAGCCTCA GACATTTCTC      240
CTCAAGAAAG GGGGGGCAAA AAAGCCTTTT GTGCCCCCTT CCCAAATTAT TTGCTCATGT      300
CGCAAGACTG AGGTCTCGAG                                     320

```

(2) INFORMATION FOR SEQ ID NO:1394:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

```

GAATTCGGCC TTCATGGCCT AACGCCATCT ACGACCTGAT CGAGCGCATC GAGGATTTGG      60
CGCTGCAGAA CCAGATCCGG GAGCACGTCA TCTCCATCGA GGACTCGTTT GTGAACAGCC      120

```

```

AGGAGTGGAC GCTGAGCCGC TCCGTACCGG AGCTTAAAGT GGGCATAGTG GGGAACTGT 180
CTAGCGGGAA GTCAGCCCTG GTGCACCGCT ATCTGACGGG GACCTATGTC CAGGAGGAGT 240
CCCCGGAAGG GGGGCGGTTT AAGAAGGAGA TTGTGGTGA TGGCCAGAGT TACCTGCTGC 300
TGATCCGAGA TGAAGGAGGC CCCCCTGAGC TCCAGTTGTC TGCCTGGGTG GATGCAGTGG 360
TGTTTGTGTT CAGCCTGGAG GATGAAATCA GTTTCAGAC GGTGTACAAC TACTTCCTGC 420
GTCTCTGCAG CTTCCGCAAC ACCCCTCGAG 450

```

(2) INFORMATION FOR SEQ ID NO:1395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

```

GAATTCGGCC TTCATGGCCT ACCGTCATTC ATTGCAGGGA CCATCAAACC CCAGACAATC 60
CTATTTTGGT GGGAAATCTA GCAGATAGAG AAGCCAAACA AGTAGCCCTA CAACCTGTAC 120
AAGGCCAGTT TCTGTGCCTG TCCTCGTTCT CTCCTCTTTA CTCTCCAGAA GAAAAGGAGG 180
ACTACCAAGC CCAAAACCTT CAAAACAAG GACCATTGTA TGTCAGGAA GGGTGCTTCC 240
TTCTTCTCA CTCTCAAACA ATCTCTATCC TTCGAG 276

```

(2) INFORMATION FOR SEQ ID NO:1396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

```

GAATTCGGCC TTCATGGCCT AGGGGGCGGG GGGCGGGGCG GGTCTCAGAA ATCAGGAGTA 60
ACTCTTTGAA AACTAAATAG TTAAAATCT CATCCAACCT CCACCTAACT TACATGCCTG 120
GTAAACCGAC ACTCTGTATA TCCTGTATAA AACATTCTAA CTGATGCCCA CGACATACTA 180
TTGGCTGATG GTTTTGCTAG TATACAGTAT GGCCACTTAC TGCCATTCCC ATGCCCTCGA 240
G 241

```

(2) INFORMATION FOR SEQ ID NO:1397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

```

GAATTCGGCC TTCATGGCCT AGAAAATGAA GAAGAAGATC ATCAAGGACC AGAAACTGCT 60
TGTGATCGTG GGGGGCATGC TGCTGATCGA CCTGTGTATC CTGATCTGCT GGCAGGCTGT 120
GGACCCCTG CGAAGGACAG TGGAGAAGTA CAGCATGGAG CCGGACCCAG CAGGACGGGA 180
TATCTCCATC CGCCCTCTCC TGGAGCACTG TGAGAACACC CATATGACCA TCTGGCTTGG 240

```

CATCGTCTAT GCCTACAAGG GACTTCTCAT GTTGTTCGGT TGTTTCTTAG CTTGGGAGAC 300
CCGCAACTCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:1398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC TTCATGGCCT AGTGACACACC AAGAACCAAG TTTCAGCTTG GTTACTGTGT 60
TGAAGACACC TTTGCTATAT TTCAAGTCAT TCCTTCTTTT CTCAATTTT TTTAATTGAC 120
AAAAATTTTA TATATCGTGT ACAACATCAA TCCATCTTGG CATCTGTATT TGTCAGGGTT 180
GTCTTAGAGG GACAGAACTA ATAGGATAA TATAAGGGGG AGTTTATTAA GTATTAACCT 240
ATATAATCAC AGGGTCCAC AACAGGCTCT CTGCAAGTTG AAGAGCAAGG AGAGCCAGTC 300
AGAGTGCCGA AACTGAAGAA CCTGGAGTCC GATGTTCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC TTCATGGCCT AGGGCCATGT TGGTTAGAAT GGTGCCATAT TTTCTGGGAT 60
AGCACCATGT TGGCTGGGAT GGTGCCATGT TGGCTGGGAT GGCACCTGCC TCAGCCTCCC 120
AAATAGCTGG GATTACAGGC ATCTGCCACC ATGCCTGGCT AATCTTTTGC ATTTTATAGTA 180
GAGAAGGGGT TTCGTCATGT TGTCAGGCTG GTCTCTCACT CCTGAACTCA GGTGATCCGC 240
CTGCCTCGGC CGCCCAAAGT GCTGGAATTA CAGGCATGAG CCGCCACGCC TGGCCTTTTA 300
CTTGAGTTT AATAGGATCG CTCTTGCTGC TATTGAGGAT AGTACATATG GGGTAATGAT 360
GCAAGCAGAG ACCTACTGTA GTACTCTTCA GGAGAGAATG GTGGCTTGCA CAAGGATGGA 420
AGCAATGAAG GTGGTGAAAA GTGGTCAGTT TCTATATTTA TTAGGAAACA CCTAGGATGA 480
TATCTTAATA GACCAAAATG TGAAATGTAA GAAAAATAGA GATGTCAAGA TGACACAAAG 540
ATTTTTGGCT TTGACAACTG AAAGAATAGT TACTATCAAC TGTGATTGGT AACAAATGCAC 600
ATGGATCTCT CGAG 614

(2) INFORMATION FOR SEQ ID NO:1400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC TTCATGGCCT AGTTCTATTT AAAAAATAAA CAACTAGACA ATTAAGTAGT 60

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TTATTAACCT ATCACAATTG AATTTTTTTT TAATTTTCAG TCTTAACACA TTTTTTAAAA 120
TGTATTAAAG TAATACATTG TAGTAGTAGG ATTATATACT CCTTGGCTGA GAATTCCAAG 180
TACTGTGGTT CTACTGTTTA GTGGAAGCTA CTGGAAGTTA AAATATAGAA TATGAAACCT 240
CGAG 244

```

(2) INFORMATION FOR SEQ ID NO:1401:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

```

GAATTCGGCC TTCATGGCCT AAAACAAACA AAAAATTATC TGAATGATCC TGTCTCTAAA 60
AAGAAGCCAC AGAAATGTTT AAAAAGTTCA TCGACTTAGC CTGAGTCATA ACGGTTAAGA 120
AAGCACTTAA ACAGAAGCAG AGGCTAATTC AGTGTCACAT GAGGAAGTAG CTGTCAGATG 180
TCACATAATT ACTTTCGTAA TAGCTCAGAT TAGAATGGCT ACCCCATTC CTAGACAAAA 240
TCAAATTGTC CTATTGTGAC TCTTCTAAAA ATGAAGATGA AGAGCTATTT AATGACACAC 300
CTTGGATTAA AACGGGAAAC TCGAG 325

```

(2) INFORMATION FOR SEQ ID NO:1402:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 364 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAAG AGAAAGTGT ATTTTCCTGT TAGTGACATG 60
TAGTCCCTTT GTTCTAGTAG GAAAAAAGGT GCCTAGAGGT AGTATATAGA GTAAATATTG 120
TTCCTTTAGC CTACTTCCTG CAGCTTCCAA TTTATCCAAG GAAATGTCTA CAACAATTTT 180
GTTCAAAAGT CTGTTCTAGT CAATAGCAGG AGAAGTCCAC GTTATTGGGC TGATTTTGCT 240
TACATCAGCA AGAGAAATGT CACGTGATAC TCAGGCCGCG CTTTCTCTTC CATCACACCA 300
TCTTCAAGGA ATGTCAATAA ACCCACTTGT GCTAGGCAGG ATTGAATTCT AGACCTGCCT 360
CGAG 364

```

(2) INFORMATION FOR SEQ ID NO:1403:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

```

GAATTCGGCC TTCATGGCCT AGTTAGGGAC TAACATTGT ATCAACAGTT GATAAATGTC 60
TAAGATTGTT TATTATACAG CAGGGTACAA TGGTAGTGCT AATGCCAACA GGGCACCATG 120
GAAGTTAGTC TAAAAATTAT CGCTAGGCTT TATACAAGCA ACAACATATG CTGCTGCTCT 180

```

TAGAATTTTG GGAAATGATC TGCTTCTAAT ACTAAGCAGT TCTTTAACAT TTTTAAATAT 240
TGAATTCTAG ACCTGCCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

GAATTCGGCC TTCATGGCCT AGCAATTTGC TTCAGTTTCC TTATGTTTGC CTTTCTCATC 60
TGTCTCTTT TCCATTTTAT TCCTACTCTG TCTCAGTCCA CTTACAGTTA TATTTCTTAT 120
CTGTGTATTT TATAATATTT GTGCTTTAAT ACTTTTAAAA TATCCTTTAT TTTACTGTTT 180
CTTCTCTTCC CTTGTCTATAT TTAAAGTGT TTTATTTCTC AGCCTTCTAT ATCTTTGTCAT 240
TAATTCGTGT CCTCTACAAT AGAGTCCGTT CCAAGCTTTC TGTCTTCTG TGTCTTCCA 300
CGGCTCTGGC TCTCTCTGCA TTATTTCTTA TTTATGGAAT ACAAATCTTT TACCCTTGTA 360
TTTTTCTCAC TCCTCTCCAC ACACCCCGA CTCGAG 396

(2) INFORMATION FOR SEQ ID NO:1405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

GAATTCGGCC TTCATGGCCT AGACCAAAAT GTCTGCCAG ATAAAGGATA CATTGTGCAT 60
ACATACACTG GGGAGAGGCA GACAAAAAAA CAATGTAGTT TGAGTGTGTG TGCGTGCTTG 120
CATGCGTGCA TGCAGGCATG TGCATATATA ATGCTAAAAC ATGATAAGTA CTATTAAAAA 180
AACAGGTTAG GGTGATTGAA ACTACTAGGG TATGAATAAG AGTGGGTGC AATTAAAGT 240
AGGGTCATTG TGGTTGGCCT TATTGAGGTG ACATTGGAGT CAAGACTTGG AAGAAGAAAG 300
GTTGTTGGCC ACACAGCTAT TGAGGGAAAA ATGTTCCAGA TAGAAGAAAC AGTCAGGGCA 360
ATGCCTTGGG ATGGAATCAT GCATAGAGTA TTCACAGAAT AGCAAGGAAG CTCTAGTTCT 420
AAAGTAAAGT GACTGAGACT CGAG 444

(2) INFORMATION FOR SEQ ID NO:1406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

GAATTCGGCC TTCATGGCCT ACCTAGAAGG TAGTAATGAT AAGCATTTAA TTAGAAGTAG 60
GCCTGAAGTT TGCAGTGCAA TGCAGTAAGT ATTTACCGAG TGATTCATAT GAGTAAGGAT 120
GTGATAGCTG CTATAAGAGC TGCAAAGTTT ATTAAGATAC ATCCCTGTCC TGGAAACACT 180

GCCAGCTTCG ATGAGAATAC AACAAATGTTA GATATATTTCG TTTTGAAGA TACCTTTCCC	240
CCAGTTATT TCATTTCACA GCTTCTCCAG CCTCCTTCAG CTCTGTTCT CCCTCTTTC	300
TTTTCTGTCT CAATTTTCCT GCCAGCCCT AAATTCACAG AGTAAATCCA CCAGAACCTC	360
GAG	363

(2) INFORMATION FOR SEQ ID NO:1407:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

GAATTCGGCC TTCATGGCCT AGGCTTCAGG GATAACCACG TTCAGGTGGG TTAGACACAC	60
CTCCTGTGGG AGGGTGATTG CAATTAGCTA TCATAAGGCA GGAGACACAA CAGCAACTTA	120
AATTATCCAC AAGCAGAATC ATGAGCTGTT TGCAAAGGGA GTTTCATCG CAAGACAGTT	180
TCACTGTATT TAAGCGAGAT CCTGCCCTCG TACACGATCA CCGCTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1408:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

GAATTCGGCC TTCATGGCCT AGGCTTCTAG AACAAAGATG TAGGCAGGCT CCCAAATGGA	60
GAGGTAAACA TGACCGCGTT GTTTGAAACT ACTTCATTAA TTTGTAAATC AGAACCAAAA	120
AGCTCTGGCC CTCCCACTTC TCTTAGCTGA CCTCCTCCC CACTTACGGA TAAACAGACT	180
TTAACTTCCC TAACCCAGAA ACACTTCAC CAAAAATGTA TGGTTATACC TTATCCTAAA	240
AAGGCACCAT GCAGGCATTT AAGACTGAAC CAGTGAATC TAAATATGTA GTAGTAGAAA	300
ATATCACTAA TCAAACTTC CAGCATCAGA TGGTACAAA CCCCAGAGG ACTGTGACA	360
TGTACCCCGG GATGGCAACC CCAGCTTCTG GCAACCCAC AGCCAGCGG GAGCTTCAGC	420
TCTGGTCAGG TGCACGGCTG CCAAAGTCTG CACACCTTGG GGACAAGGAA AGGAGACACT	480
TGCTTCATTG TGCTATTCAT GACCCAGTCG AG	512

(2) INFORMATION FOR SEQ ID NO:1409:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

GAATTCGGCC TTCATGGCCT AATGGATTAT ATTTCTATAA CAGTTAGAGT ACTATTCCAT	60
TTATCTCTTT CATTTTGAGT AAAGTTTGGT AGTTTAGGGA GGAATTGATC AATTTTCAT	120
AAATTGAAAG ATTCAGGTAC ATAAAGTTGT TGTTATATTA CTTATTATTC TTTAATGTC	180

TGTGGGGTCT AGTGATGTCT CCTCTTTCAG TTCTGATATT GGTAATTTGT GTCTTCTCTC 240
TTTTTGTGCC AGCATGCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1410:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 441 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAATTCGGCC TTCATGGCCT AGGGAGGTGG TTTCTCTATC ATTGCATGAG GTAAGAGTCT 60
 GGCCCTGGAT GCTAAGGCTG CAGTTTTCTA CAGAAAGGAG TCATCTCTGT GAGGCAGCAT 120
 CAGCCTCCAA GACACAGTGT GCTGACCTGG TTTTGTATAA AGATGAAAAC AGCTGTTCTC 180
 AACTGGCTGA GGCCGGCCAC AGAGAGAGCG GCGGGCTCAG CCTTCACAGG ATTGTCCTTC 240
 CACTAAAGGG TAGGGGGTTT TAATCATCGC AGAAAGGAAG TGGGGGTGAA GGTGAGGAAA 300
 AATAGAAACA CGAATTCACC CCTCAGGCCT CAGCTAGAGG AAGCTAAGAG AAGAAATGAG 360
 ATTGCATAAC TGTTAAGAAA AAGGCAAAGC TGGAGAGAAT GCAGAGGATT CTGGTTCCTG 420
 GAGAGAACCT TCAGACTCGA G 441

(2) INFORMATION FOR SEQ ID NO:1411:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 479 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCGGCC TTCATGGCCT AATTCATTGT CTGGTCCTTT ACAAAGACA TATGCTGGCT 60
 CCTGCTCTCT GTGGATGATA GGTCTACAAA GATGTGATTC AACTCATATA TGTCTCCAAA 120
 TTTATATATT AATTCATATA CTGTTTGTGTC TTACATTAAT CTAGCATTGT CTTTGGCTT 180
 GCTACTGCAG TAAGTTACCT TCTAATTCAT CATTAGGTCA ACTTTATCAA CTCACCTAAG 240
 TCCAAAAGTA AATGTAGGTT TCTCCTGGGT TCTTTTGCCT CTTAAGTTTT GCCATCCCCA 300
 AATAAGCACA ACAGAGACCT GCACCAAGAG ACCTTACTTT TAGACTGTAA GCACCAAAGT 360
 GATTTCTGTA GAGAGAGTGA GCCAGGCTCA GTCTTATGAC TGGCAATACA AGTTGAGGGT 420
 AGGAGCTTTG GACAGAACAC TAGCTATGTA TAGTGTTGTC TAGGTGAGTG CTTCTCGAG 479

(2) INFORMATION FOR SEQ ID NO:1412:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 497 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCGGCC TTCATGGCCT AGCCGATTTA TAAATATGTA TATATAACCT TTCCCTTTT 60
 GAGAGATCTC TTAGTAATAG TCAAAGCCAT ACCCTATTCC TTAGTGAGAA AGCCAGTTTG 120

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AAACGAATGT AGCAATAGAT GTAAAAACAT TTAAAGGCGT TTTAATGIGG CTTTTTAATG 180
AGCTGGCTTA TGCCTGTAGT CCCAGCACAT TGGGCAGCTG AGCTGGGAGG ATCGCTTGAG 240
CCCGGGAGTT CAAGACTAGC CAGGGCAACA TAGTGAGACC CCATCTCTAT TTAAAAAATA 300
ATGTTTTTAA AGATAAGGAA CAGACTTAAA GTGATGATTG ATTGCTCATA GAACGTTTCA 360
TTTGGGCTCC AGAACTAGGA ATGATGTAGA ATTTATTGTT GTGTCATTGT CTCATTAAAT 420
GCTGTAGTTT CCTATGTCCT TGCCTACCTT CTTTCCTCAG AGCCTCGCAT CTGACCCTCA 480
GAGAGTAGCA GCTCGAG 497

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(2) INFORMATION FOR SEQ ID NO:1413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

```

GAATTCGGCC TTCATGGCCT ACAGGAACAA AAAATGCTAT GCTATTATCT CAAAAATGCA 60
TACTCCTTCC TACTTAAGAA TAATAAATTT ATATATTATG ATATGGTAAA ATTCACTA 120
AATTGTATTT TTCCCTAGAA TGTTTAAAGC ATTATCTAAT ACCAGCTTCA GTGTCTATAT 180
TACTGTAACT TCATGAAAGA CTACTAACAA TACTGGCTAT CATTTATTAA TATTAAGTAG 240
TACTTGCCAG ATGCCGTTAG AGGTGCTTTA AATGCATTCT CATTTAGTCT TCGTGTGTAC 300
TACCGTTATC TTCACCTTTT AGATAAGGAG ACTAAAGTAT AACTAGAGCT AAGAAACATG 360
AGAAAGACGA CCTAGCTACT GCCTATTTTG TAAITCCCAT GGACTAAGCT TGGAGAAGTA 420
AGAACTATTA CTACTCGAG 439

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(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

```

GAATTCGGCC TTCATGGCCT AGCCACTTCA AGACGGCAAG TTATTTTAGC TCCTGTCTAA 60
ATAAGTTAGT GGGCTCCAGT CCTTAAACCA CTATTTTCTT TATTAATTCC TCAAGTACAG 120
ACTTTTGTAT GTAACCAGTC TTTTAAACC TGTGTATAAT GACTCATTA TGAAGTTGTAA 180
AATAAATGTA GTGAGTTATG ACCAATATAA AAAAATAGAA AAGGCCAGGC ACAGTCGCTC 240
GAG 243

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(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:

GAATTCGGCC	TTCATGGCCT	AGTCTTCCAA	GACAGGAATC	AGCAACCTTT	TTTTGTTTTT	60
CTGTATCAGT	AATTCATTCT	GTATATTTTA	AAAAGTTTAA	ACCTCTTCTT	CCTAGCCCTC	120
CAGTATTTGT	TTATAAATTA	AAACGTTTCC	CAAAGTGTTT	TCTGTGAAAC	AATAGTTCTA	180
AAAGGTGCTC	TAAGAAAAGC	TAAGTACATG	GCAAAATCCA	AAGTATATGT	TTTATTTCATT	240
ACATTTGATG	AATTTTTTTT	GTTTTTTCCT	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

GAATTCGGCC	TTCATGGCCT	AGAGAGCAGG	TTTAGCTTG	CATCCAGCTG	TTTCTTGAGT	60
GATGTGTACA	GCTTACCCCC	AAAGAGGCAA	CTGAATTTCA	GCTGCTCTAA	TACCCACACC	120
CTCAACTTAG	GTTTAGTCAT	AATAAAAAAC	AGAATGGATT	TGTTAGTTTC	ATTGATTGCC	180
ACAAACCTCA	CCTTCTGTGT	GGCAGAGATG	TGCTTTAGTT	CTTCATTGGA	ATGTTACTTT	240
CAGATCTCAC	AAACCTCAAA	CCTAGGGCAC	CACCAATGAC	AAAGAGAATG	CTAAATAGAT	300
AAATCCTTTG	CCAGGTCTTC	AAGCTTTCCA	CTCCCTCGA	G		341

(2) INFORMATION FOR SEQ ID NO:1417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

GAATTCGGCC	AAAGAGGCCT	AGCCATTATT	ATTAAAAAGT	AGGATTGCTA	CCCGCCATTA	60
CTATTAAAAA	GTAGGATTGC	TACCCGCCAT	TATTATTAAA	AAGTAGGATT	GGTACCCGCC	120
ATTATTATTA	AAAAGTAGGA	TTGCTACCCA	ACATTATTAT	TAAAAAGTAG	GATTGCTACC	180
CTCCATTATT	ATTAAAAAGT	AGGATTGCTA	CCCTCCATTA	TTATTAAAAA	GTAGGATTGC	240
TACCTGCCAT	TATTATTAAA	AAGTAGGATT	GCTACCTGCC	ATTATTATTA	AAAAGTAGGA	300
TTGCTACCTG	CCATTATTAT	TAAAAAGTAG	GATTGCTACC	CGCCATTATT	ATTAAAAAGT	360
AGGATTGCTA	CCCGCCATTA	TTATTAAAAA	GTAGGACTGC	TACCCGCCGT	TATTTGCACA	420
GCTACCTTAT	GAAAGTAGTT	TCACGCTGTC	TCGAG			455

(2) INFORMATION FOR SEQ ID NO:1418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 573 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

GAATACCTAG	CTTCCATGAT	TTATGATAGA	TATCCTTTAT	TGGACCAATT	CGTGTCTGTA	60
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ACCAGCCTCC TGTTCCTACT GCCATCCCCT CCTCATGCAC AGATGCCTCC TCCCTTGGCT 120
CCTGCTCTGA TCCCTGTACC CAGCTTGCTC CCTGCAAGCA TGTTCCCCTC CCTTGCCCAG 180
GCTCTGACAC CCCACACATG TGTGGATCCC CTCCCCTGTC CCAGCTCTGA TACCCCTTGC 240
ATGTGTGGCT GGGCTCACC TGGGTGTCCT CTCCCCTGTC CCAGCTCTGA CACCCACGCA 300
TGTGGGGCTG CCCCGTGCCT AGGTGTCCCC TCCTCTGCTC AGGCTCTGTC CTCCTGCGGT 360
TGGCTTTCCC ATTCTGGATG CACCTCACAC ACAGCCTTGT CATCTTTGGA TGAATTTGGC 420
CTCCCCATC CACTGCTGGT GCAGATGCTT CCTTACGGGG CCTTGTCTGA TGGCTTTAGG 480
GCTGAATCAT GCAGGAAGGA AGGAGAAGGA CAAGAAGAAA AGGGAAGGCT GGAAGGGAA 540
GCGGGTGGTA AAATGGTTC ACAAGCCCTC GAG 573

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(2) INFORMATION FOR SEQ ID NO:1419:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 188 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

```

GAATTCGGCC AAAGAGGCCT ATTTTAAAAA AAATATTTA ATTTTAAAT TTATTTTGG 60
TTGTTTTTGG CACAATGAAG TTTCAGCTTC TCAACCTTCT CCCCTACCCA GGGCTGTGGA 120
CCCAGACTGG CCTTGAGCCA CAGTCCCTCT TTCCCTCTC ACCCTCTTCC CCCTCCGGGG 180
ACCTCGAG 573

```

(2) INFORMATION FOR SEQ ID NO:1420:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 572 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

```

GAATTCGGCC AAAGAGGCCT ACGAGGAAAG ATCTAATTAT CATGGACCTG CGACAGTTTC 60
TTATGTGCCT GTCCCTGTGC ACAGCCTTTG CCTTGAGCAA ACCCACAGAA AAGAAGGACC 120
GTGTACATCA TGAGCCTCAG CTCAGTGACA AGGTTCACAA TGATGCTCAG AGTTTTGATT 180
ATGACCATGA TGCCTTCTTG GGTGCTGAAG AAGCAAAGAC CTTTGATCAG CTGACACCAG 240
AAGAGAGCAA GGAAAGGCTT GGAAAGATTG TAAGTAAAT AGATGGCGAC AAGGACGGGT 300
TTGTCACTGT GGATGAGCTC AAAGACTGGA TTAAATTTGC ACAAAGCGC TGGATTTACG 360
AGGATGTAGA GCGACAGTGG AAGGGGCATG ACCTCAATGA GGACGGCCTC GTTTCCTGGG 420
AGGAGTATAA AAATGCCACC TACGGCTACG TTTTAGATGA TCCAGATCCT GATGATGGAT 480
TTAACTATAA ACAGATGATG GTTAGAGATG AGCGGAGGT TAAATGGCA GACAAGGATG 540
GAGACCTCAT TGCCACCAAG GAGGTCTCG AG 572

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(2) INFORMATION FOR SEQ ID NO:1421:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 498 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

GCAAGACGGC	TACTGAGGCA	GGAGAATCGC	TTGAACCCAG	GAAGCGGAGG	TTGCAATGTG	60
CCAAGATCGT	GCCACTGCAC	ACTCTAGCCT	GGGCAACAGA	GCAAGACTGT	GTCTCAAAAA	120
AAAAAAATCT	TNGACNAAAC	ATAGTTGTIN	ACATACTTCT	TTAATCCCAG	AGTTAGTTTT	180
AAAAANNACA	TGATTGCTGT	TTTTGCATAT	TATCTCAGCG	GTCTAAAATT	AACCTAGCCA	240
TGTGCAGGAA	TGGGTAAAGT	CCCCTTAAAC	AAAAATGGGG	TTAGTTANGT	TAGTTCTTTT	300
GCCATTTTAC	TGGTCATATA	CCTGAAGCGC	TTAGCCTGAC	ACAATTGAAC	GCCAGACGGA	360
AGCCGNGATC	AGCGGTCCTG	ACGGGGGTCA	GAGTCAGACC	AGGGGTCTTT	TACCCAAGTG	420
GGGAAGATTG	GGAAAGGCCT	AGGATCAGAG	AGGGAAATGG	GTCCCTGGTT	GCCCATGGAC	480
CTAATGGGGT	CTCTCGAG					498

(2) INFORMATION FOR SEQ ID NO:1422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

GAATTCGCGG	CCGCGTCGAC	GAGGAAACCA	GCCAAGGACT	AACTACGACC	ATGAGATTGG	60
CAGTGATTG	CTTTTGCTG	TTTGGCATTG	CCTCCTCCCT	CCCGGTGAAA	GTGACTGATT	120
CTGGCAGCTC	AGAGGAGAAG	CTTTACAGCC	TGCACCCAGA	TCCTATAGCC	ACATGGCTGG	180
TGCCTGACCC	ATCTCAGAAG	CAGAACTCTC	TTGCGCCACA	GAATGCTGTG	TCCTCTGAAG	240
AAAAGGATGA	CTTTAAGCAA	GAAACTCTTC	CAAGCAATTC	CAATGAAAGC	CATGACCACA	300
TGGACGACGA	TGATGACGAT	GATGATGACG	ATGGAGACCA	TGCAGAGAGC	GAGGATTCTG	360
TGGACTCGGA	TGAATCTGAC	GAATCTCACC	ATTGCGATGA	GTCTGATGAG	ACCGTCACTG	420
CTAGTACACA	AGCAGACACT	TTCACTCCAA	TCGTCCCTAC	AGTCGATGTC	CCCAACGGCC	480
GAGGTGATAG	CTTGGCTTAT	GGACTGAGGT	CAAAGTCTAG	GAGTTTCCAG	GTTTCTGATG	540
AACAGTATCC	TGATGCCACA	GATGAGGACC	TCACCTCTCA	CATGAAGAGC	GGTGAGTCTA	600
AGGAGTCCCT	CGATGTCATC	CCTGTTGCC	AGCTTCTGAG	CATGCCCTCT	GATCAGGACA	660
ACAAACGAAA	GGGCAGCCAT	GAGTCAAGTC	AGCTGGATGA	ACCAAGTCTG	GAAACACACA	720
GACTTGAGCA	TTCCAAAGAG	AGCCAGGAGA	GTGCCGATCA	GTCGGATGTG	ATCGATAGTC	780
AAGCAAGTTC	CAAAGCCAGC	CTGGAACATC	AGAGCCACGG	CCTCGAG		827

(2) INFORMATION FOR SEQ ID NO:1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

GAATTCGCGG	CCGCGTCGAC	GGGAGAGGAA	GGGTGGGCA	GGATGGAATA	TTAAATTGTA	60
ACATGATAAA	CATGCAAGAC	TGTTATCCAA	TCTAGATAAT	TTATATACAT	TTTGATGACT	120
TAGGAAAACA	AAGCAATCAT	TTGTGACAAG	CCTAAAAAGC	TTGACATATT	TAACATACTT	180
AGGAACCTTT	TTTGTGCGGT	GGGAATTCTC	TAATTGTATC	ATGTGGGCCT	TTTGAAAGTA	240
ACAAACAGAA	GGCCAGTCTG	TTGCAAGTTT	GCTGCTGAAC	ATCACATTCC	ACCCTAAGAA	300
AACACAAGGT	GGATTGCATC	GAGGGTGGAT	ACCTTACCTT	AGCACAGA		348

(2) INFORMATION FOR SEQ ID NO:1424:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 152 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGCGG CCGCGTCGAC TTGGAGAATG TGGCCTCTGA TCACTAACCA GGGTTTTCTC	60
TTTAACTGG CTTGTTTACT TATTTCTTCA CCAAAGCCAG GGAACGTCCC TTTAGCTACT	120
GCAGCATTC TAACAGATGC GACAAATCAC AG	152

(2) INFORMATION FOR SEQ ID NO:1425:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 206 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTA GACCTGCCTC GAGATGCGCC	60
ACTTTCTGCT CACCCACCTT AGAGCCTTTG CATATGCAGT TGCTTCCTCA GAGTATTGCC	120
ATCCCCAGCA CGACCCCGAG CTCATTCTTC AGGCCACTAA CGTAAATGTT ACTTTCTCAA	180
AAACACCCTC TCCATCCCGG CACCCA	206

(2) INFORMATION FOR SEQ ID NO:1426:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 353 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

GAATTCGCGG CCGCGTCGAC GTGGGTACTT CATCCTCCTC ATCACTGGTT GGCCTGAGA	60
GCTTCTTAAG ACGCTCCATG AGCTCTTCT CTTCTCCATC ATCATCCACA TCCTTCTTCC	120
GCCTGCCTTT TCGGGTATCT CGCTTTTTTT TTGCTGCTG TTGCTGTTGC TGCTGCTGCT	180
GCTCCTTCTC CTTGAGCACT TTCTCTTCTT CCCAGCCTG TTTATCTTCT ACTGCCAGCT	240
CTTCAAAGAA CGTTTTTTTG ATCTTCTNGT CTTCTTCCC TTTCTTCACC ACTTTGTCTG	300
ATGGGCTCGT GCTCTCTCCG TCCCCGATCC ACTCGGGCTC CGGCGGACTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1427:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 343 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GAATTCGCGG	CCGCGTCGAC	AGATATTTGG	TTATCTTGAC	TTTTTAAAAT	AACATATTTT	60
TACAGGATTT	TGAGTCTGAG	AAGAGAAAGG	TAATATGCAA	GACACTTCGA	TTTGTGTCAC	120
ATTATTATGG	AGCATCATT	ATGGTTTGT	CATTCTTGT	CCTTTGGGCT	TGAATGGACA	180
GTACCAAATT	TGGGGAAATC	AGCAACTTGA	TGCACAGCTA	CGAGGAATAA	ATGCTTTTGC	240
TAATGCACAT	GGTCCCGTTG	CTTTCCCACT	GCTGAAGACC	TCTCCTTACA	GAGTGTTTGA	300
TAATGCATCT	GTTGAACATG	CACTGCTAGA	TGGTCTCTCT	GAG		343

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAATTCGCGG	CCGCGTCGAC	GAGGGGAAGA	TGTCACGCAA	GATAGAAGGC	TTTTTGTTAT	60
TACTTCTCTT	TGGCTATGAA	GCCACATTGG	GATTATCGTC	TACCGAGGAT	GAAGGCGAGG	120
ACCCCTGGTA	CCAAAAAGCA	TGCAAGTGCG	ATTGCCAAGG	AGGACCCAAT	GCTCTGTGGT	180
CTGCAGGTGC	CACCTCCTTG	GACTGTATAC	CAGAATGCCC	ATATCACAAG	CCTCTGGGTT	240
TCGAGTCAGG	GGAGGTCACA	CCGGACCAGA	TCACCTGCTC	TAACCCGGAG	CAGTATGTGG	300
GCTGGTATTC	TTCGTGGACT	GCAAACAAGG	CCCGGCTCAA	CAGTCAAGGC	TTGGGGTGTG	360
CCTGGCTCTC	CAAGTTCCAG	GACAGTAGCC	AGTGGTTACA	GATAGATCTG	AAGGAGATCA	420
AAGTGATTTT	AGGGATCCTC	ACCCAGGGGC	GCTGTGACAT	CGATGAGTGG	ATGACCAAGT	480
ACAGCGTGCA	GTACAGGACC	GATGAGCGCC	TGAAGTGGAT	TTACTACAAG	GACACTCTCG	540
AG						542

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

GAATTCGCGG	CCGCGTCGAC	TTAAGAGTCT	GCTTCGGAGA	CCGTAAGGAT	ATTGATGACC	60
ATGAGATCCC	TGCTCAGAAC	CCCCTTCCTG	TGTGGCCTGC	TCTGGGCCTT	TTGTGCCCCA	120
GGCGCCAGGG	CTGAGGAGCC	TGCAGCCAGC	TTCTCCCAAC	CCGGCAGCAT	GGGCCTGGAT	180
AAGAACACAG	TGCACGACCA	AGAGCATATC	ATGGAGCATC	TAGAAGGTGT	CATCAACAAA	240
CCAGAGGCGG	AGATGTCGCC	ACAAGAATTG	CAGCTCCATT	ACTTCAAAAT	GCATGATTAT	300
GATGGCAATA	ATTTGCTTGA	TGGCTTAGAA	CTCTCCACAG	CCATCACTCA	TGTCCATAAG	360
GAGGAAGGGA	GTGAACAGGC	ACCACTAATG	AGTGAAGATG	AACTGATTAA	CATAATAGAT	420
GGTGTTTTGA	GAGATGATGA	CAAGAACAAT	GATGGCATACT	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

GAATTCGCGG	CCGCGTCGAC	GCTGTTTCATG	AGGAGACTTA	ACCACAATTC	AAAGTGTAGC	60
AGTTGTGTAT	TTTAGCATT	TAATATTGTA	TTGAGGCCCT	GAGGTGTTAA	TATCTCAATC	120
TCAGAGTTAG	ATGTTTCATG	CCTTTTTGAA	TTTTTAAAC	ATTTTTCATA	ATTTTTTTTT	180
TAAGTTAGGG	AGCACATTGA	GTGAAGTTCT	CTGTGTAGAA	CAATACCTTC	TGCTCTGCTT	240
CTCCCAGCTT	TCACTGAGGG	CTGGAAAAGG	ACAGGCCTGT	CCAGCTGTAC	TGTCCCCTG	300
TGTATGGGGA	AGCTCAGGCT	CTGGTGGGAA	CAGGGGGCAT	GGATGTCAAA	CAACTGATGT	360
GCAAACACTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 632 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

GAATTCGGCC	TCATGGCCT	ACTACTGATG	AGAACATTAT	CTGCATATGC	CAAAAAATTT	60
TAAGCAAATG	AAAGCTACCA	ATTTAAAGTT	ACGGAATCTA	CCATTTTAAA	GTTAATTGCT	120
TGTCAAGCTA	TAACCACAAA	AATAATGAAT	TGATGAGAAA	TACAATGAAG	AGGCAATGTC	180
CATCTCAAAA	TACTGCTTTT	ACAAAAGCAG	AATAAAAGCG	AAAAGAAATG	AAAATGTTAC	240
ACTACATTAA	TCCTGGAATA	AAAGAAGCCG	AAATAAATGA	GAGATGAGTT	GGGATCAAGT	300
GGATTGAGGA	GGCTGTGCTG	TGTGCCAATG	TTTCGTTTGC	CTCAGACAGG	TATCTCTTCG	360
TTATCAGAAG	AGTTGCTTCA	TTTCATCTGG	GAGCAGAAAA	CAGCAGGCAG	CTGTTAACAG	420
ATAAGTTTAA	CTTGCACTCG	CAGTATTGCA	TGTTAGGGAT	AAGTGCTTAT	TTTAAAGAGC	480
TGTGGAGTTC	TTAAATATCA	ACCATGGCAC	TTTCTCCTGA	CCCCTTCCCT	AGGGGATTTC	540
AGGATTGAGA	AATTTTCCA	TCGAGCCTTT	TTAAATTGT	AGGACTTGTT	CCTGTGGGCT	600
TCAGTGATGG	GATAGTACAC	TTTCACTCG	AG			632

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

GAATTCGGCC	TCATGGCCT	ACTAATTTC	AAGAGCTAAA	CTTTATACCG	CCTGCAATAT	60
TTCCATTTAC	TACCAGTTTT	TTTCTGACCT	AGTCAGATAT	AAGAAGCCCC	CTTACTGGAT	120
ACAAGACAGT	TAATTATCAG	ATCCAGTCTG	ATCCTAGATC	CAGTCTGATC	CTAGACCCAG	180
TCCAGTTTCT	GTTGTGACTT	CCAAACCCAG	TTTGGATCAG	AAATTTGCTC	AAAGAACTA	240
GGAGAGCTCA	AAACACAAAT	ATGTGGAGCT	TCTGAATCTG	AGAGAGAACG	AACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 335 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

GCGTGGTTTC	ACCTTGTTGG	CCAGGCTAGT	CTTGAACCTCC	TGACCTCAGG	TGATCCACCC	60
ACCTCGGCCT	TCCAAAGTGC	TGGGATTACA	GGCATGAGCC	ACCGCATCTG	ACTGGTGAC	120
TTTACTTTGA	CCTGTCATAA	ATCCCTTGST	TGTTATTAC	TAGTTTTTAC	TTAGACAGC	180
AATATCTTTT	CAAGGAAAAA	TTTAAAAGGA	AAAAATGTCT	TATATTTACC	CTCATGTTTA	240
CCATTCCCAG	TGCTCTTTAT	TTCTTTATGT	CAATCCGGAT	TTCAATTTGT	TATCATACTG	300
TTTCTGCCTG	AATAACAGTT	TAACAGCAAC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

GAATTCGGCC	TTCATGGCCT	AATGCTCTGT	GTCACGTCTCT	CCCGGTGCTC	AGCACAGACA	60
AGTTCAGAC	AGATTTTTAT	GATCAATGCA	ACGACGTGGG	GCTCATGGCC	TACCTCGGCA	120
CCATCACCAA	AACGTGCAAC	ACCATGAACC	AGTTTGTGAA	CAAGTTCAAT	GTCCTCTACG	180
ACCGACAAGG	CATCGGCAGG	AGAATGCGCG	GGCTCTTTTT	CTGATGAGGG	TACTTGAAGG	240
GCTGATGGAC	AGGGGTCAGG	CAACTATCCC	AAAGGGGAGG	GCACTACACT	TCCTTGAGAG	300
AAACCACTGT	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

GAATTCTAGA	CCTCCACCCC	TGTAGAACAT	TCTCCTCACT	TAGGAGATAG	TCATATTTTC	60
AGGCTGCCTT	TGAAACTGTG	GGTACACAAA	CAGCAGAGCG	ATCTATTTCA	GCAGTTGAAG	120
TTGTATTTGA	GCCATTATTT	CTTCCACTCT	CTTTTGGTT	GAGTTTCTAG	GAAGGAAAGG	180
GCTGAACTCC	ATGACTGCTC	ATATTACAGT	GCTAAGTCCT	CACAGCCATC	CACTGTTTAT	240
ACACAAGAAG	AACTAGGCC	CACCAAGAGT	AAGCGCCTGC	CTGAGGTCCG	TGAGTGAGTA	300
AGGGCCAAAG	GTGAGGTTGG	GATCTGGCCC	TTTCTCTTTT	CTGGCCACCA	CAGGGCACTA	360
CCTCCCATAC	CCACACACTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:1436:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

GGAGAACTGC TAAGGTCCAC AACGTCGACA ATTGAAAGCT TTGCTGCACA AGAAAAACAA	60
ATGGAAGTTT GTGAAGTATG TGGAGCCTTT TTAATAGTAG GAGATGCCCA GTCCCGGGTA	120
GATGACCATT TGATGGGAAA ACAACACATG GGCTATGCCA AAATTAAAGC TACTGTAGAA	180
GAATTAAAAG AAAAGTTAAG GAAAAGAACC GAAGAACCTG ATCGTGATGA GCGTCTAAAA	240
AAGGAGAAGC AAGAAAGAGA AGAAAGAGAA AAAGAACGGG AGAGAGAAAG GAAAGAACTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:1437:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 228 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

GAATTCGGCC TTCATGGCCT AGACTTTTAC ACATTTTAT TAGCTACCTG GAATTATTTT	60
TGTAACACGT TAAGTGTAAG TAAACAAATA ATGCTTTGCT TTTTGTTTTC TGGAATTATT	120
GTGTATTTTC TTTGCCAAAT GCATATATCT TCAGGTCTTT TTTTATAAC CATATGCATA	180
CCAAGGCACC ATTCCATTGA CTTTCCAAC TCTGTCCCAA CCCTCGAG	228

(2) INFORMATION FOR SEQ ID NO:1438:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 498 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

GTGAATTCCA GTCCCCACCC AGAAACCCGC AGCATGATTG TCTGCCTCCT TTTTCATGATG	60
ATTTTATTGG CAAAGGAAGT TCAACTGGTA GACCAAACAG ATTACCTTT ACTTAGTCTC	120
CTTGGACAGA CAAGCTCACT TTCATGGCAT CTTGTGGATA TTGTGTCGTA CCAGAGTGTG	180
CTAAGTTATT TCAGCAGCCA TTACCCGCCG TCCATCATCC TGGCAAAAGA ATCTTATGCT	240
GAATTAATCA TGAAGCTCCT AAAAGTGTCT GCGGGCCTTT CTATTCTTAC TGACAGCCAG	300
AAGCATCTTG ATGCAGTTCC AAAATGCCAA GCTTTTACTC ATCAGATGGT TCAATTCCTC	360
AGCACCTGG AACAAAATGG AAAAATCACC TTAGCAGTCC TAGAACAGGA AATGTCTAAG	420
CTCTTAGACG ATATCATTGT CTTTAACCCG CCCGACATGG ACAGCCAGAC CCGCCACATG	480
GCCCTCAGCG GTCTCGAG	498

(2) INFORMATION FOR SEQ ID NO:1439:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 314 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

GAATTCGGCC	TTCATGGCCT	AGCAGGGAGA	GGGGTTCTGT	GCTCCTGAGA	TTAGTTCAGA	60
TGGTCTAACC	ATTGTTCTAT	ATGTGCATTT	TAGTTAATAT	TGTGTATTAA	AGGATAAGTC	120
TTAATGCTCA	AAGTATGTTA	AAAATAGATG	TAGTAAATCA	GTCCCTTTGT	GAATGTCCTT	180
TTGTTAGTTT	TTAGGAAGGC	CTGTCCTCTG	GGAGTGACCT	TTATTAGTCC	ACCCCTTGGA	240
GCTAGACATC	CTGTACTTAG	TCACGGGGAT	GGTGGAAAGAG	GGAGAAGAGG	AAGGGTGAAG	300
GGAAGTGGCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:1440:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 424 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

CCAGCCGTCT	GCAGCTCCGG	CGGCCACTTG	CGCCTCTCCA	GCCTCCGAG	GCCCAACCGC	60
CGCCAGCACC	ATGGCCAGCA	CCATTCCGC	CTACAAGGAG	AAGATGAAGG	AGCTGTCGGT	120
GCTGTCGCTC	ATCTGCTCCT	GCTTCTACAC	ACAGCCGCAC	CCCAATACCG	TCTACAGTA	180
CGGGGACATG	GAGGTGAAGC	AGCTGGACAA	GCGGGCCTCA	GGCCAGAGCT	TCGAGGTCAT	240
CCTCAAGTCC	CCTTCTGACC	TGTCCCCAGA	GAGCCCTATG	CTCTCCTCCC	CACCCAAGAA	300
GAAGGACACC	TCCCTGGAGG	AGCTGCAAAA	GCGGCTGGAG	GCAGCCGAGG	AGCGGAGGAA	360
GACGCAGGAG	GCGCAGGTGC	TGAAGCAGCT	GGCGGAGCGG	CGCGAGCACG	AGCGCGGGCT	420
CGAG						424

(2) INFORMATION FOR SEQ ID NO:1441:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 346 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGCC	TTCATGGCCT	AGTCAGGCTT	60
AAGTTTAATA	AATAGCAAAT	TGCATACAGA	TATTTACAAT	GATCGAAAGA	CAAACAGAGG	120
TCCTATCCGT	GCAGTCCCAA	CAATAAAGAC	AGGCATTGGC	ATAAAGTGTT	TATAAATTCT	180
TGGGTACAGC	TGTTCTGAAA	GTAAAGTTCA	CTTTCATCC	TAAAAAAGT	CCGCTATTCC	240
TCCCTGGCTG	CTCTGGACTG	TCCTCATCCT	CTTTAGCTGC	TGTTGCGCCT	TCCGCCACCG	300
ACGAGCTAAA	CTCAGGCTGC	AACAACAGCA	GCGGCAGCAT	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1442:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 591 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

GAATTCGGCC	TTCATGGCCT	AGGCTTCCCT	GTTCCCTCAG	CCCCAGTCGA	GAGGAAAGAG	60
AATCGGGCCA	CTGCCAGAAA	GAGAGTCAAG	CAAACCTGGA	AGGGCAAATC	TGAGAGTGGG	120
AAGGCCAAAG	GCCGAGGCC	AGATTTAGTA	TTCAC TAGCA	GCGCCTTCGG	GTAGCAGGAT	180
GATTCCTTTT	CCTGCCTGTC	TGCTGCTGGC	TCTCTTCCCT	AAGGTACAGG	TTGGCAGGAC	240
CACCTCCGCC	TACTTCTCCA	CCATCCCTAG	CATGCCAGCC	CGTTCCCAGA	TCAACCTGCC	300
AGTGGAGTCA	GGCAGTGAC	TCCTGGAGCC	AAGAGGGAAG	GGCAGGGTAG	AGAGGGTATG	360
TCCAGTAGCC	TGGAGCTCCA	TGGTGGCTTC	ATGCCTCCCT	TCTCCCAGCT	CAGGTGGCCC	420
TGAGGGCTCC	CTCGGAACAG	TGCCTCAAAT	CCTGACCCAA	GGGCCAGCAT	GGGGAAGAGA	480
TGGTTGCAGG	CAAAATGCAC	TTTATAGAGA	TTTCTATTG	CTGGGAAGGT	GTGTTTCTCC	540
CACAATTTGT	TGTGAATAT	TCACTTGT	TATAAATGTC	TGACCTGTCC	G	591

(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 526 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

GAATTCGGCC	TTCATGGCCT	AGATTGAATT	ACCTGCCTCG	AGCTCCTGTC	CTTAGGTGAT	60
CTGCCCGCCT	TGGCCTCCCA	AAGTGCTGGG	ATTATAGGAG	TGAGCCACCT	GGCCCAGCTA	120
GCTTTTAAAG	TTCTGCCAGC	ATAGCCCCGG	GATGGGGTGG	GGGTAGACAG	GGCCTTAGGA	180
CTTTCATTTT	TAAAATGCTC	ACTCCACAGT	GAAGAAACAG	GTGATGACTA	TCCTGAATAT	240
TTGGGAAGCT	GTGTCTTAGA	ATTTTGGCC	TCAGTTCCAG	AACCCACAGC	TTCTTTACAA	300
CATGCTTCAA	GCCTGGGACT	GAGCTGCCAG	TAAATAAACC	CCTAGTAACC	TTAATATGGG	360
TTAATAAGAT	TAGGTGCCCG	CTCTGCACGC	TCCCCTGCCC	CTCCTCGTCC	GGGCACCTGT	420
TATGCTAGGC	CAGCATGTTT	GCAGCTTAGC	CAGGGAAAAT	CGTGGACCAA	GACAGGGCTT	480
TTTCATCCACG	ACTGGCTAAA	AAGATGGCTC	TCAATAATAT	CTCGAG		526

(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

GATTGAATTC	TAGACCTACC	TCTCTTTTTT	TGTGGTCTCT	CCTTCATTCT	CTGTTCATTT	60
CTCCGTGAGA	TTTTCTGATT	AGTAGTTACC	TTCAGCATGC	CAGTTGACTT	GCAAACCTAC	120
AATCCAACCT	TTCTTCTACT	TTGTCACTCG	ACAACAGCCT	GGTTTGTAGC	TGATTCCAGG	180
ACTTCTTCAC	TTGGGTGGCC	ACTCTCATTA	CCACAGAGTT	CACTAGTCAT	GGTGAACACA	240
CCAGTCTTTT	ACACCTCCCT	CACTCCCAAA	CCACTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1445:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 644 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

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GAATTCGGTC TTCATGGCCT AGGGGAAGAA AGGCACCTTT CTCACAGGGT GGTGAGAGAG      60
AGGAAGGGGG ACGGGGAAAG CCCTTTTATAA AAGCATCAGA TCGGCTGGGC ACAGTGGCTC      120
ACGCGTGTA TCCAGCACT TTGGGAGGCC GAGGCGGGTG GATCGCGGG TCGGGGGTTT      180
GAGGCCGGCC TGGCCAATAT GGTGAGACCC CGTCTCTGCT GAAGATACAA AAATTGGCTG      240
GGCATGGTGG CGGGCACCTG TGGTCCCGGC TGCTTGGGAG GCTGAGGCGG GAGAATCGCT      300
TGAGCCCGGG AGGCAGAGGT TGCAGTGAGC TGAGATCGCG CTA CTGCACT CCAGCCTGGG      360
CAACAGAGCG AGACTCCATC TCAAAAATAA AAGAAAGGCA TAAATATTAC ATTACCTCT      420
GAATACTGTG GTTGATACT TGAGTTTTTA TGTGTGTATA TATATGTGTA TAGGAGAGTA      480
AAAATAAAAT GAAATTAGGA TTTTGCAAGT TATAATCATA TAAAATTGAT TACCCTAAAT      540
ATATCATTAG GATATTATGT TATTTACATC TCTTATGCTA ATTCTAATT TCTTTTATTG      600
TAGTATAGTA GAATTGAGAT TGNNAATGG AATTGGTCCT CGAG                                644

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(2) INFORMATION FOR SEQ ID NO:1446:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 756 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

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GAATTCGGCC TTCATGGCCT ACCTCACCCG GCCCGGACAC GGACAGGATT GACAGATTGA      60
TAGCTCTTTC TCGATTCCGT GGGTGGTGGT GCATGGCCGT TCTTAGTTGG TGGAGCGATT      120
TGTCTGGTTA ATTCCGATAA CGAACGAGAC TCTGGCATGC TAACTAGTTA CGCGACCCCC      180
GAGCGGTCCG CGTCCCCCAA CTTCTTAGAG GGACAAGTGG CGTTCAGCCA CCCGAGATTG      240
AGCAATAACA GGTCTGTGAT GCCCTTAGAT GTCCGGGGCT GCACGCGCGC TACACTGACT      300
GGCTCAGCGT GTGCCTACCC TACGCCGGCA GGC GCGGGTA ACCCGTTGAA CCCCATTCGT      360
GATGGGGATC GGGGACTGCA ATTATTCCCC ATGAACGAGG AATTCCCAGT AAGTCCGGGT      420
CATAAGCTTG CGTTGATTAA GTCCCTGCCC TTGTACACA CCAACCCGTC ACTGACTTTT      480
ACCGCAGCTG GAACTGTGCT CCAGGGCCTT TCCATCTTTT CCCCACACT CCCTTTGACC      540
CTGTGTTGCC CTCAGAGGCC AAATTCTTGG GCTCAGGGAC TGGCTTTCCG CCTATTGGTG      600
GTGGAGCTGG GGTCTGGCA AGGAATTCA GGCAGCGCTT GGAGGCAATG TTCCCCGAGA      660
GCAGTTCACG GTGGTGATGT TGA TTTATGA GCGGGAGGAA GTGCTTATGA ACTCTTTAGA      720
GAGGCTGAAT GGCCTCCCTT ACCTGGA ACTCTCGAG                                756

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(2) INFORMATION FOR SEQ ID NO:1447:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

GAATTCGGCC	TTCATGGCCT	ACCTGCCTCG	AGGTCCTGG	GATCATCTGA	ACAGAAAGTGC	60
ACAGGCTACT	TGTACAGAGA	AAAAATTAAT	ACTCAAAGGA	AATCTTCATT	TTTtagattg	120
ACTTTGGGAA	TTTGAATTTT	CATCAGTGCA	AATATAAATT	TCTCTATCCT	GCTCTGAGGC	180
TAATTGGTAC	CATATTTTCC	CTTTGTGTCT	TGTGACTCTG	CCACATCCCA	TCTCATCCTG	240
GCCTCTGAGT	CAAGAACCCA	GTGAACTGAC	TTTCTAGTTC	TAGAAGTTC	GCTGCAAGGC	300
CAGGAAAGCT	TGAGAAAGGT	ATTGTGGAAG	AAGCAAAGGT	AGACCCCAT	TCACTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1448:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 146 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

GAATTCGGCC	TTCATGGCCT	AGGGAAAATA	AGTTAATTCT	AAATCAAATC	TAAATATTAT	60
ACCTCATGCT	ATGGTTTTAT	TTTATTTTCA	TGCTGCCGTT	ACTTTTCCTC	CCCAAAGCAA	120
TGTGTTTTCC	AGCCACAACC	CTCGAG				146

(2) INFORMATION FOR SEQ ID NO:1449:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

GAATTCGGCC	TTCATGGCCT	ACTTTTCAAA	AGCAGCTTTG	CTCTACTGAT	TTGGGTAATA	60
GCTTAGTTGC	AGTTGGNTTG	GGAGGAAATG	GGAGCAGAAA	ATTTGAGAGA	GTGAGTGTAG	120
ACAACTCTTT	CAAGGAATTT	CGCTATAAAT	GGGAGTAGAG	ATCTGAAGAC	TGAATAATTA	180
GCAAACTGAA	AAGTGGGAAG	ACGTAATTCT	CTTATTATTT	CATTTTCTT	AGTGAAATAA	240
GAGGTGAAGT	TCTCTGAGTA	ATAGGAGGGT	CAAACAGNG	TTAGAAGTTC	ACAAAGAAAG	300
GTCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:1450:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 545 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

GAATTCGGCC	AAAGAGGCCT	AGCATGTTGT	GGCTGTTCCT	ATCGCTCCTG	TTTGTCTTCT	60
GCTTTGGGCC	AGGGAATGTA	GTTTCACAAA	GCAGCTTAAC	CCCATTGATG	GTGAACGGGA	120
TTCTGGGGGA	GTCAGTAACT	CTTCCCCTGG	AGTTTCCTGC	AGGAGAGAAG	GTCAACTTCA	180
TCACTTGGCT	TTTCAATGAA	ACATCTCTTG	CCTTCATAGT	ACCCCATGAA	ACCAAAAGTC	240
CAGAAATCCA	CGTGACTAAT	CCGAAACAGG	GAAAGCGACT	GAACTTCACC	CAGTCCTACT	300

CCCTGCAACT CAGCAACCTG AAGATGGAAG ACACAGGCTC TTACAGAGCC CAGATATCCA	360
CAAAGACCTC TGCAAAGCTG TCCAGTTACA CTCTGAGGAT ATTAAGACAA CTGAGGAACA	420
TACAAGTTAC CAATCACAGT CAGCTATTTC AGAATATGAC CTGTGAGCTC CATCTGACTT	480
GCTCTGTGGA GGATGCAGAT GACAATGTCT CATTGAGATG GGAGGCCTTG GGAAACACAC	540
TCGAG	545

(2) INFORMATION FOR SEQ ID NO:1451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

GAATTCGGCC AAAGAGGCCT ACAGTAAGCA GATGAACTTG CTTGCTGTTC TCGAAGTGAG	60
GACTGAAGGG AACGAAACT GGGGTGGGTT TTTGCGCTTC AAAAAGGGGA AGCGATGTAG	120
CCTCGTTTTT GGACTGATAA TAATGACCTT GGTAATGGCT TCTTACATCC TTTCTGGGGC	180
CCACCAAGAG CTTCTGATCT CATCACCTTT CCATTACGGA GGCTTCCCA GCAACCCAG	240
CTTGATGGAC AGCGAAAACC CAAGTGACAC AAAGGAGCAT CACCACCAAT CCTCTGTAA	300
TAATATTTCA TACATGAAGG GAACCCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

GAATTCGGCC AAAGAGGGAA GGGAAAATTT CAAGTCAGAT AGAATTCTAT ATATACCATT	60
TCTTTGGAAC CTTAGCCCT CAAGATTCCA ACATCATGAC CTCAGTTTCA ACACAGTTGT	120
CCTTAGTCCT CATGTCACTG CTTTGTGTGC TGCTGTGTGT GGAAGCAGTA GAAGCGTATA	180
TGCACGAAAA AGAAATGGAC AGATGTGACT TTGAAAGGCC TACTGAGTCA AACCTCACCC	240
TGAAAACCTT TGCAGCACTC GAG	263

(2) INFORMATION FOR SEQ ID NO:1453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

GAATTCGGCC AAAGAGGCCT AATTTTAAAG CCCTGCTAAC TTCAATGTCT AGGTCACCCA	60
TTTGTATTATT TTTATGGTCT TTTTTCATCC TGATTTTGG TCATTGGTC CCGTCTTATG	120
GCATACCTGG TAATATTTTA TTGAATCCTT AGTACTGTAC ATGAAAAATT GTAGAGGCC	180
CAGTAGTTTT CTTTCTCTGA AGAGGAGTCA CCCTTTCCTT CACTAGACAG TTATGTTGGG	240

GGTTATATAC	CTTACTCCAA	TCAAAGATTG	AGCTGAGTCA	GAAGTCTAAG	GGAGTTAAGT	300
TTTTGTGTCC	TCTGGGGACC	AGGGGTTCCA	ACTAAGACTG	TGATATTAC	CAGGATCCAA	360
TTTCCCGATG	CCTCTTGAAC	TCTTATTCTT	ATCTTTTAA	CACATCAAGG	CAGCTGGTTT	420
GCAATTTTTCT	TTCTGTTTCA	CTTTTATGCT	TCATCCTTTG	CAGCTTTAGA	AATTGACAGT	480
TGTCTTACAG	GGAAAAGTAG	CTGTGTAACA	AGCTCATGTC	TCTGCCTCTC	TTCCACTGAT	540
ATCTTAGCCC	CGCAGGAG					558

(2) INFORMATION FOR SEQ ID NO:1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

GAATTCGGGC	AAAGAGGCCT	ACCTAAACCG	TCGATTGAAT	TCTAGAAATA	CAATGATTTT	60
AAAAAAGATT	TCCAAAGGCT	TTTTCTTTTT	TTCTTTTTTC	TNGAGACAGG	GTCTCACTCT	120
GTCGCCCAGG	CTGGAGTGCA	GTGACACAAT	CTCGGCTCAC	GGCAAGCTCC	GCACTGCCCC	180
CTCAGGTTCA	CGCCATTCCT	CCGCCTCAGC	CTCCCGAGCA	GCCGGGACCA	CAGGCACGCG	240
CCACCACGCC	CAGCCAACTT	TTACATTTTT	AGTAGAGACG	GGGCTTCACC	ATGTTGGCCA	300
GGATGGTCTC	GGTCTCTTCT	GCCTCGAG				328

(2) INFORMATION FOR SEQ ID NO:1455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

GAATTCGGCC	AAAGAGGCCT	ACTTGATGTC	TGTGACCCAC	ACNTATTTCG	CACTCCCTC	60
CCCTTTTGAA	AATCCCTAAT	AAAACTTGC	TGGTTTTTGC	GGCTAGTGGG	GCATCATGGA	120
ACCTACTGAC	ATGTGATGTC	TCCCCCGGAT	GCCCGGCTTT	AAAATTTCTC	TCTTTGTAC	180
TCTGTCCCTT	AATTTCTCAA	GCTGGCCGAT	GCTTAGGGAA	AATAGAAAAG	AACCTAGGTG	240
AATATTGGGG	CAGGCTCCCT	GATGAAATGA	TATATATTCT	TAAAATAAAC	TTTTCATCTT	300
TGCATATACG	TTTATATGCC	GAGTTTTTCT	CAACCTTGTC	TTACAGCACT	TTGTATACTA	360
CATTCTAGCC	ATACTAAACT	CTTGCACTTC	CTGAGACATG	TGCTGTATCC	TATTTCTTCT	420
GGTCTTTTTC	TCATTGATTA	ACTACCTGGA	GCATACTTTT	AATTCAGTGT	CAGCGCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:1456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

GAATTCGGCC	AAAGAGGCCT	ACTTCACCTT	CAAGTCCCCT	TTCTCAAGAA	TCCTCTGTTT	60
TTTGCCCTCT	AAAGTCTTGG	TACATCTAGG	ACCCAGGCAT	CTTGCTTTCC	AGCCACAAAG	120
AGACAGATGA	AGATGCAGAA	AGGAAATGTT	CTCCTTATGT	TTGGTCTACT	ATTGCATTTA	180
GAAGCTGCAA	CAAATTCCAA	TGAGACTAGC	ACCTCTGCCA	ACACTGGATC	CAGTGTGATC	240
TCCAGTGGAG	CCAGCACAGC	CACCAACTCT	GGGTCCAGTG	TGACCTCCAG	TGGGGTCAGC	300
ACAGCCACCA	TCTCAGGGTC	CAGCGTGACC	TCCAATGGGG	TCAGCATAGT	CACCAACTCT	360
GAGTTCCATA	CAACCTCCAG	TGGGATCAGC	ACG			393

(2) INFORMATION FOR SEQ ID NO:1457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

GAATTCGGCC	AAAGAGGCCT	AGTGTGTG	TGTGTGTG	TGTGTGTG	TTATCTCCTT	60
CAACTCTGAC	CACCTGGAAG	TCAGCCTAAT	CTCTGCCCTC	GTGTTGATCT	TTAATTCAAC	120
ATTTAATTAC	CTATCTTGGT	ATCCATATGA	ATTTGATTGT	TTTTTTGGCT	TTTTTTGAAC	180
TCATAAAAGG	TATCCAAGTT	CCTGGAGGGC	ATAGTGCCCA	TCTCCTCCCA	TCCACCAAGT	240
GACATTCTTT	TCCAAAAGAC	ACATGG				266

(2) INFORMATION FOR SEQ ID NO:1458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

GAATTCGGCC	AAAGAGGCCT	AGGTTGTAGT	TACTTTTCTCAG	GATAGATACAG	GGTTTTAGAT	60
CATTACAGTT	TAAGTTTTCT	GACCAATTAA	AAAAACATAG	AGAACAAGAG	CATATTTGAC	120
CAAGCAACAA	GCTTATAATT	AATTTTTATT	AGTTGATTGA	TTAATGATGT	ATTGCCTTTT	180
GCCCATATAT	ACCCTGTGTA	TCTATACTTG	GAAGTGTTTA	AGGTTGCCAT	TGGTTGAAAA	240
CATAAGTGTC	TCTGGCCATC	AAAGTGATCT	TGTTTACAGC	AGTGCTCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:1459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

GAATTCGGCC	AAAGAGGCCT	AGTTTTATGA	GAGGGTTTCC	ATTAAGAAGT	TAATTGAAAT	60
TCTTTATTTA	TGTAAAATGA	AATTTCCAAT	TAAATTATTT	CACACAGCAT	TTTTTCCCCT	120
TAATTTTATT	AGTTTTTTTA	TTTCTTGGCC	GACCCAGGCC	AGGAGCTTAG	GGAAAATGAT	180

GAGGCCTCTT TTACGCTGTA GTCCTGCAAA TGCTGTGTTT TATTCCCCCT CCCCTGCTCA 240
GCACTCACCC ACGACTGACA CATGGGGTAC ACACACACAC ATACTCGAG 289

(2) INFORMATION FOR SEQ ID NO:1460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC AAAGAGGCCT ACACCTGCGT TGAACATCT GATCCAGTGA TAGCACGTCA 60
CTAGGTGCCT TAATTAATAA AGCCAAAATA TCTTCCACT AGCAAATAA TCGTATTCAC 120
TTTTACTCTC CCATTTTAA TTAATCTTTC CTATTCATT TCACCCTCTC ATCTCTTCC 180
TCTATGGAT TATCTCAGGT ATCTAATCCA ATCACTACT GTTTAATGAA TGTAAATTGCA 240
ACCAGTCTGC AATTCCTAAG GTTTTGTTC TTTGCTTTT TCTTTGTAG TCCATCTCTT 300
TGCTACACTC AAGCAGTCT AGAATTCGAG 330

(2) INFORMATION FOR SEQ ID NO:1461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GAATTCGGCC AAAGAGGCCT AGGGACAGTG ATTATAGGAC TCCACACATG CAACTGAATC 60
TAGCATTAAT GACTTTAAAT TTTTGTAGCC TATCTAAAGG CCAGATGCTA TCAGCAGCTG 120
AACGGCATCT ACCAAAACCA GCTGCAAAGA TAGAAGCGGA ACAACTGGTT TGGTGGAGAG 180
ATTCGATAAC AACGAGTTGG GAAATAGGTA AAATAATAAC ATGGGGTAGA GGTTATGCTT 240
GTGTTTCTCC AGGCCAAAAC CAGCAGCTGA TTTGGATACC ATCAAGATAC CTGAAAACCTT 300
ATCATCAGCC AGATGCCAAG GAAGAGATT TGGGAGGAAC CCGAGGACCC CATGTTATTA 360
TTTACCTAT TCCCCAACTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GAATTCGGCC AAAGAGGCCT ACGATGACGT CACCGTCACC ACCGGCGTGA AGCGAGACAG 60
TGGTGGAGGC TTCTGGACTG GATGGAGGAC CTGAAGACAT GAGGTGGAGG CACAGGTAGA 120
AGAGAAGATT CTCACCATCG CTGATTCACA CAAAAGCATT TCTCCAAGTG GTTGCAGATG 180
ACATGATTTT CCAGAGTGTG AGAGCTGAAG TGTGTTTCCT TGTGTATATA TACTGTGGTT 240
CCTTTATCCC TTCATCTGTG GATAGACAGG TGCAACCGTG TGGTTCCCCA CGATATGATT 300

TCATTGTGGT TTTCTGTCTG AAGAGTATCC CAGTATGTAC CTGTGGAGCA GCTTCTTTAT 360
CCCTTCTTAC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:1463:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 174 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTGGGC GGAGACACAA ATTCAAATCA TATCAACCTG GTAAAGAATT TGGATTTTAT 60
TTTGAGTGTG TTAGTGAGTA TTGCATGGCT TTGAGCAGAG AAAGGATGAT TTATATGTTT 120
AAAAGAGTGC TTGCCTCTT ATATGTGAA GAGATTGTAG GAGGAGGACT CGAG 174

(2) INFORMATION FOR SEQ ID NO:1464:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 122 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC AAAGAGGCCT AGTTGCGGTT TAAATTCCA AATGTATGGC ATTTGCTTGT 60
TTTTTAAGTT GATTCTAGT TTTATCACAT TGTGGTCAGA GAATGCTGAG AAAGAGCTCG 120
AG 122

(2) INFORMATION FOR SEQ ID NO:1465:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC AAAGAGGCCT ACTTGAGCTT TTTTCATGTG TATATATTTA TGCTTCTTTT 60
CTAAAAAAA TTGAGATGGA AATTCACATA ACAGAATTAA CTAAAGCATA CATTTCATTG 120
GTATTACTA CATTACAAT GTTGTGCAAT CATTACCTCT CTCCAGTCT AAACATTTC 180
TCACCCCAA AGGAACCCCT AAGCGGTCAC TCCCCACTCC ACTGTCTCCC ACAGCCCCTG 240
GCAACCAGCA GTCTGCTTTG TGTCTCAATG GATTACCTA CTCTTGATAG CTCTACAAAT 300
GGAACAATAC TCGAG 315

(2) INFORMATION FOR SEQ ID NO:1466:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 175 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

GAATTCGGCC AAAGAGGCCT AGGTAAGAGA AACGACCAAT TCTACCAGTT ATTCTACAAT	60
GTGGGTTTTT ACTGCTCTGT TCACATGCCT TATTGAGACT TCTTGTGGTG GTCAATTGCT	120
AGATGGTCTG TTGAATTAT CTGCTGTCAT ACATCCAAAA AGGTCTCACA GAGAG	175

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GAATTCGGCC AAAGAGGCCT AGAAGGACAC CTCCATCCAT TCCACGCAGT TGCTCAAAGC	60
AGAAATTTTC AGTGCAAGTC TTGATGCTGC GCCGTCCCCC ACTCCCTACA TCAGAACGCA	120
TCCCTCATCT GGAATCCAGC GGTGGCTTCT TGATGCTGCG CGGTCCCCCA CTCCCTACAT	180
CAGAATGCAT CCCGCATCCA GACTCCAGCG GTGGTGCTCT ACCTGCACGC TGTTGCCAAG	240
TCCAAGCTAC CATACTCCTG CCTGAGCTAT GACAACAGCC TCCTCACTGA TCTCCCTTT	300
CTTCCCTTTG CCTCCTCCAG CTCATTTTTC ACAGTGTAGA ATGACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 419 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCGGCC AAAGAGGCCT ACTATACTAA AATTCTGTGC AAAAAGATGC TTGAAATTAT	60
TGTAGAGACT GAATCTTTGC TGCTTGTTAT AAATATTGCA GGGCATAAAC CTCCATTCA	120
TAGGTTTCATC AGCTTTTATG ATTGGGAGTG ACAGGGAGGC AGCATTGCAG TCCTTAGTCC	180
TAGGTGTGGT CTAGAATTTA CCCTGTATTT AAGTCACTTT GGAATAGAAG TTTTITTTCT	240
CGGACAGGAT ACACTATATA TTTTAAATC TCCTCCATA GTCGTAGTGC AGAGATATAA	300
ATAGAAGTAC AGGTAAGAGA TGTCTTCTGC CTTCAAACC CTTCTAAGT TTGTGTGCTG	360
CTTTAACTTT ATTACATAG AGCAGTCTGT TTTATTACTC AGGATATGGG CCACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 612 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

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GAATTCGGCC AAAGAGCGAT GGGGACAAAG GCGCAAGTCG AGAGGAAACT GTTGTGCCTC      60
TTCATATTGG CGATCCTGTT GTGCTCCCTG GCATTGGGCA GTGTTACAGT GCACCTCTTCT      120
GAACCTGAAG TCAGAATTCC TGAGAATAAT CCTGTGAAGT TGTCTGTGC CTACTCGGGC      180
TTTTCTTCTC CCCGTGTGGA GTGGAAGTTT GACCAAGGAG ACACCACCAG ACTCGTTTGC      240
TATAATAACA AGATCACAGC TTCCTATGAG GACCGGTTGA CCTTCTTGCC AACTGGTATC      300
ACCTTCAAGT CCGTGACACG GGAAGACACT GGGACATACA CTTGTATGGT CTCTGAGGAA      360
GGCGGCAACA GCTATGGGGA GGTCAAGGTC AAGCTCATCG TGCTTGTGCC TCCATCCAAG      420
CCTACAGTTA ACATCCCCTC CTCTGCCACC ATTGGGAACC GGGCAGTGCT GACATGCTCA      480
GAACAAGATG GTTCCCCACC TTCTGAATAC ACCTGGTTCA AAGATGGGAT AGTGATGCCT      540
ACGAATCCCA AAAGCACCCG TGCCTTCAGC AACTCTTCT ATGTCCTGAA TCCCACAACA      600
GGCGCACTCG AG                                         612

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(2) INFORMATION FOR SEQ ID NO:1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

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GAAAAGCCAA GACTTTAACT TTCATTACAT ATCTAATAGT TGATATCACC AGTTACCATT      60
TTGAATTTTG TATAGTACTA GGTTAGAACA TTGCTTAATC CTTTTAAAAA AAATGCATTT      120
ACGTAGAACT CGAGCAGGAT GTTTGGCCCC GATGTTTTTT CTTCATACTC TTCTGTCGCG      180
TCTTCCCAT TCTGCACAGT TCTACCCAC TACTCTCGAG      220

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(2) INFORMATION FOR SEQ ID NO:1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

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GAATTCGGCC AAAGAGGCCT AGGGCATCAT GCAGACACAT CTGTAAAGC AGGAAAAAAA      60
AAACCATGTG GAAGATTAAG CTAGGCAGAG TGCCTGAAAA GCCCTCTGCA ATAAGTTGAG      120
CTGGAAAAAC CTCCATATCT AAAGATGCTT TAATCATCTC AAGAACACCA ACAACATTTT      180
CTATTATAAT ATAACATGA TAGATGTGAA TCTACCTCTT GGATTAAAGC AATAATTTTA      240
TAGCTATCAA ATTTTCACAG ACACCATTTT CACTACTCTG AGTTGCATCT CTAACAAGCT      300
TCTTTAGCCT CTGCCTACAG ATTTCAAGTGA CAAAGCCATT CAGCTCGAG      349

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(2) INFORMATION FOR SEQ ID NO:1472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

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GAATTCGGCC AAAGAGGCCT ACAACAAACC ATTCTTCAGC ACCTTTGCAA AAACATCTAT      60
GTTTGTTTTG TACCTTTTGG GCTTTATTAT TTGGAAGCCA TGGAGACAAC AGTGATACAAG      120
AGGACTTCGC GGAAAGCATG CTGCTTTTTT TGCAGATGCT GAAGGTACTT TTGCTGCTTG      180
CACAAACAGAT ACAACTATGA ATAGTTCTTT GAGTGAACCT CTGTATGTGC CTGTGAAATT      240
CCATGATCTT CCAAGTGAAA AACCTGAGAG CACAAACATT GATACTGAAA AAACCCCGC      300
GGTACTCGAG                                     310

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(2) INFORMATION FOR SEQ ID NO:1473:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

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GAATTCGGCC TTCATGGCCT ACAACTTTAA GATTAGCTAC TTTGAATAAT CTCAGTAGGT      60
TCTGGGGCAC AGGAGCTGCC CCTCTTGGTC TGAGATTGCG CCATGGGGTG ATTAGGACAG      120
GTATAGTGGC ACAGAGTGTA AAAACCCCAT AATGGTGTGG ATTCTGGATT GCTTAGTTTG      180
CATTTGACAA GTGCATGCCT GGGAGGAGGA CTCCTCTTAG TAAAGAGGAT GGGAGGCAAG      240
AAGAGAGGCC AGAGGCCAAG ACAAGGTAAC TTAGGCATAG CATCAGGTTG TCTCGAG      297

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(2) INFORMATION FOR SEQ ID NO:1474:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 510 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

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GAATTCGGCC TTCATGGCCT AAAAAAGTAT GCAACACTCA GTTTATTTAA TACTTACAAG      60
GGGAAATCAT TAGAAACACA GAAAACCACA GTTGCAGCTC GACATGGATT ACAGAGTCTT      120
GGGAAAGTCG GTATTTACAG GCGTATGCCT CCACCTGCTA ACCTCCCAAG TCTTAAAGCA      180
GAAAACAAAG GCAATGATCC TAATGTAAAC ATTGTACCTA AAGATGGCAC AGGGTGGGCA      240
TCAAAACAAG AGTAACATGA AGAAGAAAAA ACACCAGAAG TGCCACCAGC ACAGCCAAAA      300
CCTGGGGTTG CAGCTCCCCC AGAAGTAGCA CTGCTCCCA AATCATGGGC CAGTAACAAG      360
CAAGGTGGGC AAGGAGATGG AATCCAAGTG AATAGTCAGT TTCAGCAAGA ATTTCCAGC      420
CTGCAGGCAG CTGGGGATCA GGAAAAAAA GAAAAGGAAA CAAATGATGA CAACTATGGA      480
CCTGGACCCA GTTTACGTCC ACCACTCGAG                                     510

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(2) INFORMATION FOR SEQ ID NO:1475:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

GAATTCGGCC	TTCATGGCCT	AATCCATTCA	TTTGATGGAC	ATTTTCTAAG	TACCTGTGAG	60
CCAGGTGCTG	CCATTTCAAA	GTCTCTTCTT	ACCACGCTCC	TCAGTGGCTA	GACATTTTCA	120
CGTGGCCAGA	AAGTCCCGAC	TCTTGCTGGG	CGTCCCTGGA	CAAGTTGCCT	TCCTCTCTCTG	180
AGCTTGGCGC	TCCCCATCTG	TATAGTGGAG	ACCTTGGCC	CCCCTCTGTA	CGGAAGGGCC	240
GATGCGAAGC	TGCAGTTAAA	AAAGGCTCAC	ATGCTCCTAG	CCTTGTGCAG	TCAGGAGGGG	300
AGACCAGGAC	AGTTGGAAAT	TATGATTGCA	AATGGCTTTG	CATTTTAGAT	CATTCGTGTG	360
TGTGGATCAG	AGAAACGCAC	AAGTTCCTG	GCATCTCGAG			400

(2) INFORMATION FOR SEQ ID NO:1476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

GAATTCGGCC	TTCATGGCCT	ACCACATTTT	GTCAGCAGAG	AGCCTTTTAA	ACTTGATTTC	60
CAACTTCCTG	TTGTCTAAAC	GGAACCCCTCC	GAACGTAGGA	CTTATAGGGG	AAGCTGCTGT	120
GCATGTCAAA	AAAAC TACTA	ATCAGAATGA	GCTTTGT CAT	CCAGAGCCAG	AAGCTGCTGCA	180
GAAATTTTTA	TAATTTTGCA	ACTTCTTTT	TTACAAGGAA	CTTTGTGCT	ACTACACATC	240
AGGACTTTTG	AAGCATCCAA	TAAATCCATT	TAATAAGTAT	GAGCATGTGT	CTGAGTGGAC	300
AAGAAAGTGA	AACCATCCAT	GCTACATTGG	ATAATTTTTC	CTCCCCCAGA	CTGGACAGGG	360
AATCTCAGCT	TTCAAAACAG	AGTAACCTGG	CTCCACTTAC	AAAGCTGCAC	AGGCATTAAA	420
GATCGTGCTG	CCTTTGTTAG	GCAGATTG	AGGGGAGAGC	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

GAATTCGGCC	AAAGAGGCCT	ACATGTAGCT	ATCCTAAGAC	GTATTTTATT	TTGAGCCACT	60
TTCTCAGAGG	GAATTGGGTG	GGTGTGGTCG	TAAGAACACC	TAGAAAATAG	GGGTGAAACC	120
TTTATGGGGC	CAGGGGAGCC	ATGGCAGAGG	GTGGAGTGGG	GGATAGAAGC	CTTCAGACTC	180
CTCCGCCCCA	GCCACTCTGC	ACCTGGGGCC	TTTCAGCTGT	TAAAATGAAA	AGCCAATTAT	240
CTTCTGTAAA	TGAGGGAAAA	AAAGAAGGAA	TAAAAGTGTC	TATTATGTAT	GCTGATATGC	300
ATAACACTTC	AAATAAAAGG	ATATATAAGC	ACTTGACAAA	TTGAGGGAGA	AGGAGGGGAG	360
AGTGCTGGGC	GCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:1478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

GAATTCGGCC	AAAGAGGCCT	AGAGATTCAG	TTTATTCTAT	ACTCAGACTT	TGGTATCCCC	60
TTAGATGCCC	ATGTCAAAA	TGAGAAAGTT	GGTGACATGG	TATGGCATT	TATTGCTTTT	120
TGTTTGTTTT	CCATTGCTAC	TTTCACTCAA	ATTCCAAGGA	AATCAGAGAA	GAAGGGCTTT	180
TGGTGACCTA	AAAGTAGAAA	TGAAAGCAAC	AAAATGCATT	CTGTCCAGCA	GTACACTGAA	240
GACAAAAAAT	GTAGTTGAAA	AGTCTCAGGG	AGCGCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

GAATTCGGCC	AAAGAGGCCT	AATTTGCTTT	GCCCAGTAGT	TGGAAAGTGA	ACTCGACTCG	60
TGATGGTTCT	CCTGTCACCT	TGGTTGATAG	CAGCCGCTCT	GGTAGAGGTT	AGGACTTCAG	120
CTGATGGACA	AGCTGGTAAT	GAAGAAATGG	TGCAAATAGA	TTTACCAATA	AAGAGATATA	180
GAGAGTATGA	GCTGGTGACT	CCAGTCAGCA	CAAATCTAGA	AGGACGCTAT	CTCTCCCAT	240
CTCTTTCTGC	GAGTCACAAA	AAGAGGTCAG	CGAGGGACGT	GTCTTCCAAC	CCTGAGCAGT	300
TGTTCTTTAA	CATCACGGCA	TTTGGAAAAG	ATTTTCATCT	GCGACTAAAG	CCCAACACTC	360
AACTAGTAGC	TCCTGGGGCT	GTTGTGGAGT	GGCATGAGAC	ATCTCTGGTG	CCTGGGAATA	420
TAACCGATCC	CATTAACAAC	CATCAACCAG	GAAGTGCTAC	GTATAGAATC	CGGAAAACAG	480
AGCCACTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

GAATTCGGCC	AAAGAGGCCT	AATTCATTCA	GTGTCATGA	GTTGAGTGCT	TACTACATGC	60
AAGGCACTCT	GCTAGTTATA	TTCTAATAAT	GCAGAGATAA	TTAGACATGG	TTCCCGCCCT	120
CAAGAAGCTC	ACAAAAGTAT	TCAGGAAATA	ATGCAGACTA	GTGATTTTGC	TATAAAATTA	180
TTTTTTGAAG	AAGCAGACAC	AGCAGTATTT	ACCTGTAGGT	GGAGCAAGTA	ATAAGCCATG	240
CTGTGCAATA	TATACATAAA	GCTTCTGCTT	CTCATGGGAA	TTTAGTTACA	GTGCTTGGAA	300
TGAGAAGGGG	AAGGAAGAA	TTAACAAATC	CCAAGATTTT	TGGAGCAGAT	TGTACAGCTG	360
TGACTTTTGA	AAACAGAAAG	TAAGACCCTC	AGAAAACCAA	TGAAGTCTAA	GAGAAATAAA	420
ATTTAGTGGA	CAGGTATGAA	AAGTGTAAAT	GCGCCTAACT	ACCAGATGGA	GACCTTCAGA	480
ATGGGCTATC	CTTAGAGTCT	AGTACATCAA	GAGACCCCTC	GAG		523

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

GAATTCGGCC AAAGAGGCCT AAAAAAAAAA AAAAAAGAAG ATATAAGCTA CTAGTATCAA	60
AAATGAAAGA GGGGCTGTTT CTACTGATCC TGCAGACACT CGAG	104

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 337 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

GAATTCGGCC AAAGAGGCCT AACTGAACT AAGAGATGCA CCTGAGAAAA CCTTGGCTTG	60
CATGGGTTTG GCAATACATC AGGTGTTAAC TAAGGACCTT GAAAGGCATG CAGCTGAGTT	120
ACAAGCCCAG GAAGGATTGT CTAATGATGG AGAAACAATG GTAAATGTGC CACATATTCA	180
TGCAAGGTGA GGAATTTGAT GTATTAAAGT ATTACTTAGA ATGGGACATT GAAGGCCATT	240
TAAGAATGAA NACGCTCATT TTATAAAAT GAGGAAATCA GTAAAAAGGA CATGAGTTCC	300
TTGCCATCTC ATTGATCATC AACTGAACA ACTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 168 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

CGATTGAATT CTAGACCTGC CTCGAGAGCG CGCTGTTGAA TACCCAGTAT GATGGTCCTT	60
AGCCTTCTTA GACCTTTCCT GTACCACTAC CTCTATGCCT TTTGCCAAGT CCAAGTGTTC	120
ACCAGAAATG GAACTGATGC CAGAAAGACT ACAGCAACAA TACTCGAG	168

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 478 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

GAATTCGGCC AAAGAGGCCT AGCAACCGCG CCTGGCTGCC TTTTCATTTT TAAAAACGTC	60
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AGTGTGCGTC CCACACAACA TGCAAACCCT CCTGCCGAGC TSCGACCTTC GCCTGTCACC      120
GAACCTGGTG CTGAGTGTGG TGAGAGTGAA TCCTGCAGCA CGTGGCGCAC TGTCGGCCTC      180
TTTCATGTTT AGCTTTTGAT TGTGCTTATT GTCCATTGTG ATTTCTTCTT CTAAGTGTCT      240
GTTCAAGACT TTTCCGTCTT GGCTGGAGGT GGGAGGTGCC TGCTCCTGTG TTTTCTGGCA      300
TCTTTCTCTG CTGTCTTTGT GTGTCTGCAC TCAGGGAGTT TCCCTGGGGT GTGTGCCTAG      360
AGAGGTGCTG GTTGTACATT TCAACGTAGG GACAGATTCC CAGCGTGTCT TTAAAGGAGC      420
TGTGCCGCTG TGTGCTCACT TGACTCGCCG GCGTTCTTGT TTCTCCAGGC CTCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:1485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

```

GAATTCGGC~ AAAGAGGCCT ACACACTGCA AGAACAGAGC CAAGAACCTA CCATGTACCC      60
TTTACTTGGT TTTATCATT CTGTTTTCGA CATTGCTTT ATCATTCTTG TTATATTTAC      120
ATATAGTTCC TTCCCTTGG ATTATTTGAG AACAACTGC AGAACTACA CCTCTTTCCC      180
CGAAGAACTA GGCATTAGCA CATTACAAGA ATACGATGAT AGAGATCAGA AGTTAAATGC      240
TGATGAGATA TTCCTGTCTA ATCCACGAAC CTTATTTCTT TGTCATCAGT TGTCCTCAAC      300
GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

```

GAATTCGGCC AAAGATTGCT GTCCTTCAAC GTGTTTCATTA TGAAGTTATT AGTAATACTT      60
TTGTTTTCTG GACTTATAAC TGGTTTTAGA AGTGACTCTT CCTCTAGTTT GCCACCTAAG      120
TTACTACTAG TATCCTTTGA TGGCTTCAGA GCTGATTATC TGAAGAACTA TGAATTTCTT      180
CATCTCCAGA ATTTTATCAA AGAAGGTGTT TTGGTAGAGC ATGTTAAAAA TGTTTTTATC      240
ACAAAAACAT TTCCAAACCA CTACAGTATT GTGACAGGCT TGTATGAAGA AAGCCATGGC      300
ATTGTGGCTA ATTCCATGTA TGATGCAGTC ACAAAGAAAC ACTTTTCTGA CTCTAATGAC      360
AAGGATCCTT TTTGGTGGAA TGAGGCAGTA CCTATTGGG TGACCAATCA GCTTCAGGAA      420
AACAGATCAA GTGCTGCTGC TATGTGGCCT GGTACTGATG TACCCATTCA GGATACCATC      480
TCTTCCTATT TTATGAATTA CAACTCCTCA GTGTCATTTG AGGAAAGACT AAATAATATT      540
ACTATGTGGC TAAACAATTC GAACCCACCA GTCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

GAATTCGGCC	AAAGAGGCCT	AGATTGAATT	CTAGACCTGC	CTCGAGAGTC	ACGCTTAGTT	60
TGCCATTGTG	CCAGCTAGTG	ATATTGCTGA	TGTTTTTTGT	GGGTGTTCTT	TTAGCAAAAC	120
GTGAATGAAT	GCATGTTTAC	AGGGATGCTC	TGGACTGGAG	GATGGTGAAA	TCCATCGTGG	180
TTGTCCCTCT	CCCTGAATGT	CCTTTTGTAG	CCAGGGCATC	TTTCCAATAT	GAATTATTAA	240
GCCTTAACTT	ACATTTTTCG	ATAACTTATA	ACTCTCCATT	ATATATTGG	TTACATTTCT	300
TAGATGTTTT	CAACATTCTT	TATTAAAGTT	ATTTTATCAG	CATCCGCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

GAATTCGGCC	AAAGAGGCCT	ACAAATGGGC	AGAAGTGAAA	CAGTCTTGTG	AGATACCTGT	60
TTTTTAAAC	TCCATTTTAG	AAAAGGAATT	AACTAGGACT	TTATATCTCT	TCGTTCAATA	120
TAATTTTAAA	GAAGAATTGT	TGAAAAGTAG	ATATGTTTTG	CCATTTGCTG	AGAATATTTT	180
GTACGTTAGC	TTGTCTCTTA	CAAAACTAA	ATGTGTTCTT	ACTTCTGATA	ATGTATGTCA	240
ATTTAAATTT	TGGAATGGCC	AAGATAAGTT	GCTCTGCATC	TGTCCTTCAT	ATGGCTCCTG	300
AGCACAGCTC	AGTGACTGGC	CCTTGCACTG	CTTCTACCGT	TGTAATGGGT	AAAACCAGGG	360
GAAACTGCCT	TGCTCTTGAG	CTTGAGCAGG	TTAATCAAAA	GGATAGAGCT	TCCACTCTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

GAATTCGGCC	AAAGAGGCCT	AGAGAAAGAG	AGAAAGAAAG	GAGGGAAGGA	AAGGAAGGAA	60
GGAAGGAAAG	AAGGAAGGAA	GGAAAGAGAG	GAGACTGAAG	GGCCAAGGAG	GGCATACAAT	120
GGAAGATGAG	AGCTGTGCTC	CCGGGAGGCT	TGTACTCATC	AAGAAAGAAA	GGAGAAAGAG	180
GGGGAAGAAA	AGAAAAAAA	AGAATAAAGA	AAGGAGAGAT	GAAGGAATAA	AGGAAAAAAA	240
GTAGAAAGCA	AAGAAGGAGA	AGGGAGAGAA	GAAAGTAGGA	AGGAGAACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

GAATTCGGCC	AAAGAGGCCT	AGTGCAACTA	CAGATAAGTA	AACTTCGACT	GGGTTTAGTA	60
ACACCTGTCT	TTAATATTG	TCAGTGTACC	TACATTGATA	ACATTGACCT	TTGGAAAAAT	120
TGGACTTGTA	TTGTGTTATT	TCTCTAGCAT	ATTAGTCCTA	AAAAAGTGTG	AGTAATAGGA	180
GATGGAGAGG	TGTTTGTGGA	TTGTCATTCT	GTGGTTCCTA	CAGCATTCAA	GTTGCGTCCG	240
TACGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:1491:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

GAATTCGGCC	TTCATGGCCT	AATTCTTAGA	AATAAAGCCA	CTATCATGCA	GGTTATTAC	60
AAGTAAAAAC	ATGGAGTCAG	CCCAGTAGAG	AAACGTTCAA	ATAGTGTGGC	TCCTGCTCTG	120
CCACGTTCTG	TTTATGACTT	TGGATATTTT	ATTATCCCTT	TCTGGGGTAG	TTTTTCAACT	180
TTAAGGTCCT	AATAAACTTT	TAGATTTTAT	GACCTGTCCT	CTTAGCCCT	GTAAGATTTA	240
AATATTATAA	AGAACCTGAT	TTCAAAGACA	CTGGTAAACT	TGGACAACTA	AACAAGTCCA	300
AGTATGGTAC	TTATTGTGT	GTGTGCATAT	ATTAACCTTA	TGCATATGCT	GTTTTACAC	360
CTATTTAAAC	TGTTTTTGAA	AAACGTATAT	ATCAGTTTTT	GGAAAACAGA	AGAAGATTTT	420
AAACGGCTAC	TCGAG					435

(2) INFORMATION FOR SEQ ID NO:1492:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 360 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

GCGATTGAAT	ACATGTTCAA	TAAGGACAAT	GGACAGGCAC	CTTTTACCAT	CACTCCTGTG	60
TTTTCAGATT	TTCCAGTCCA	TGGGATGGAG	CCCATGAACA	ATGCCACCAA	AGGCTGTGAC	120
GAGTCTGTGG	ATGAGGTCAC	AGCACCATGT	AGCTGCCAAG	ACTGCTCTAT	TGTCTGTGGC	180
CCCAAGCCCC	AGCCCCCACC	TCCTCCTGCT	CCCTGGACGA	TCCTTGGCTT	GGACGCCATG	240
TATGTCATCA	TGTGGATCAC	CTACATGGCG	TTTTTGCTTG	TGTTTTTTGG	AGCATTTTTT	300
GCAGTGTGGT	GCTACAGAAA	ACGGTATTTT	GTCTCCGAGT	ACACTCCCAT	CGATCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:1493:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 271 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```

GAATTCGGCC TTCATGGCCT AAGCAGACAA TATAGTAGTA ATTTAAATTT TTGTTTCCTG      60
ACTTTCTGTA GTCCCTAAAC AAACAACAAA AAATCCTAGT AATCTTAAAC TTTTACATTA      120
ATAGAGATCC AAGAGAAAAT AAGCCATTTT TCACCATTGT GGACCCAAAT AAATCATAGA      180
CATGGTATTA AGAAGCCCTT TTCAGTCTGG TTGCAGTATT ATTTTCCTAC CTTTCTTTT      240
CCTGTTCCCT GCTGTATGCC CACAGCTCGA G                                     271

```

(2) INFORMATION FOR SEQ ID NO:1494:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

```

GAATTCGGCC TTCATGGCCT AATGGGTCAG AAATTGGGC CTGGCTAAGT GGATCCTCCA      60
CCCCAGGGTC TCTCACAAGG CTGCAATCAA AGGGCTGACT AGGACTTGGA ATCTCATTG      120
AAAGTTAGAT TGGGGAAGGA TCTGCTTCCA AGCTCACTCA GTAGTTACTG GCAGGATTAG      180
GTTTCTCCAA GGTGCTTGA CTAAGGGTCT CAGTTCCTCA CTGACAGTTG GCCTGAGGCT      240
GCCTTCAGTT TCTTGCCATG TGGGCCTCCC CAGCATAACT GTTTACTTCA TCAAAACAAA      300
CAAACTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:1495:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 138 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

```

GAATTCGGCC AAAGAGGCCT ACGTCGATTG AATTCTAGAC CTGCCTCAGC TCTAATTATG      60
GTTTCATGTTA GATTGTCTGC CCTTCCTCTT CCTCTTCTCT TTTGGGGAAA GATAATAGCA      120
CTTAATAACG CCCTCGAG                                     138

```

(2) INFORMATION FOR SEQ ID NO:1496:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

```

GAATTCGGCC AAAGAGGCCT ACAAATTGT TCCTTTTACG TACGACAGAC TTCTGAAATG      60
GTAGTAGTAG TAGTGCCCTT TTTTCTCTC TTTTAGCCCC AG                                     102

```

(2) INFORMATION FOR SEQ ID NO:1497:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

```

GAATTCGGCC AAAGAGGCCT ATTTGTTTCT TTGTACTGCC TAACTTTAGA AAGACCTGNA      60
ANCGGTANCA TGAAAACATT TTTAGAGAGA ATTACCAGGC ATTTTGGTA GAATGAGTGT      120
TTAATGGAAC AGTCCAGAGA ACTCATCAA GATGTTTATT AAAACGCGCA GACCTGCTCC      180
AATTAAGGGC CCAGTCAGTG GTGTTAACAG TGAAGGGACT GTTCCAGAGG CGTGCTGCAC      240
GGGACGCCCA CCCCAAATAC AAATGGTTTG CCAGTAGCTC ACAAATGAAC CCCATTGCCT      300
TGCACTTAAG CTTCTGAAG CACATACATA TCCTGCTTTG TGCTTTCCGC CCTATAGTAA      360
ACGCAAACCA ATGGAGATGT GAAGCAATCT AATAGCAACA AGGCAAACCT CTACTTCCTC      420
TAAAGAGGAT TGCATCCTCT TGCTATCTTT GCCGATGCTC TCCTACAGAC CCATCCGCTC      480
GAG

```

(2) INFORMATION FOR SEQ ID NO:1498:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 144 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

```

GAATTCGGCC AAAGAGGCCT AAAATTTCAA TAGGCTATAG AGTTTCCAT GAGAGTGTGT      60
GTGTGTGTGT GTGTGTGTGT GTGTAAAGAA CTCTTACATT TCAGTGAGAA AATATTTTCA      120
TTGAAAGGAA ACACAGAACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:1499:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 418 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

```

GAATTCGGCC AAAGAGGCCT AAAATAACTG TCCAATTAAC TGAACACTGA GGTAGCTGGG      60
TACAGACTTT AGCGGCTACA TTTGACAAAC ATTGCAATTA CAAGCAGCAA CACAAACCAA      120
CCTTGGGATG GGGATAGAAA TCTTTTCNTT CTTCTNTTCTT GGGGGTTTGA GACAGAGTCT      180
CGCTCTGTCA CCCAGGCCGG AGTGCACTGG CGCAATCTCC GCTCACTGCA AACTCCACCT      240
CCTGGGTTCA AGTGATCCTC CTGCCTCAGC CTCCCAAGTA GCTTGGATTA TGGGTGCCCCA      300
CCACCATGCC TGGCTAATTT TTGTATGTTT GATAGAAACG GTGTTTCACC CTGTTGACCA      360
GGCTGGCCTT GAGCTCCTGA CTTCAAGTGA TCCACCTGCC TCAGCCCCCC GACTCGAG      418

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(2) INFORMATION FOR SEQ ID NO:1500:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 337 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTCGGCC AAAGAGGCCT ACAAAGACCA AGGTATCACA TTCTGCCATT AGCTGCTACC	60
TCTCCCTTCC CCATTTCAG ACAGATTGAG CCCACTTTT GTGTCCTCCT CTGCTCTTAA	120
GCTGTTTCTC ATCGTGGGTG CTCAGCAACT TGTCTGCTCT CACTCTAGTT TCTATTTGCT	180
TCCCTGAAAT TAGCCTTTAA CTATGCCAG ACAAGCCAGA GCCTTGCCTA AACTTCTAAT	240
TCCTCTGTGC TTCTTAGTGT ATCCTTTCTG CCTGCTTGCC TGCCTGCCTT CCTGCCTGCT	300
TGCCTGCCTT ACTGACCCTT TGCCCCACGC TCTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1501:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 105 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1501:

GAATTCGGCC AAAGAGGCCT AAACCGTCGA TTGAATTCTA GACCAGCCTC ATCTCCTGTT	60
CCTCTCTCCC TCCCAACTAT GTTGGCTCC CTGCTGCTCC TCGAG	105

(2) INFORMATION FOR SEQ ID NO:1502:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 701 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1502:

GAATTCGGCC AAAGAGGCCT ACTGTGAACC TAAAACTCCT ATAAAGAAAA GTAAAGTCTT	60
AAAAACAAAC AAATACACAG CAACAATCTT ATTTTCCCCA GCCTGTCTTA TGTTAGGGTG	120
CAGATGTGAT TTCTGTGTGG CTAATCAGAT GCCCTTGTGT GAGAGACTGA TTTGAACAGA	180
GGCAGGGGCA TCCATCTTTC TAGTGTGAGT CACAGCAGAA GCAGTGAGGT CCTGGTGTCT	240
GTCGCTGCAG TGGTGGCTTT TGATACAGGA GTTCCCTGAT GGCAGTAGCT TCTTTGTGGG	300
TTCAGTTCTG TTGTGTGGTT CTGCAAGTTC AGCTTAGAGT CTGTTTCTTC AGCTGTTTCA	360
ATGACCCTCT GAGCTGTCTA CCATGAAAAA TTCTATCCTG CTTACACTAA TTAGAGCCAA	420
TCCTGTTATT TACAAATGAA TATCCTGACC AGTAATGAAG GTCTAGACTT AACTGTAATA	480
TTTTATGACT TAAATTGTTG GCATATGTGA AAACTTTTTG TTTATTCTAA ACTTTTTTGT	540
TGTTGTTGTA AAATAAAACA TTTATGAAAA GCGACCAAAA AAGGATAACA AATGAGAGTA	600
ATGCAACATA CAGGCACCAG CAACTCAGGC CAGGGAGATG ATATATGAGC ATCCCCAATC	660
TCCCCTTTAC ACTCCCTCAA ATAACCTCAAT CAAGACTCGA G	701

(2) INFORMATION FOR SEQ ID NO:1503:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 257 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1503:

```
GAATTCGGCC TTCATGGCCT AGGAACTAGG TGACTTTGGG GTCATCTCA CAAGTTTCCT    60
TACACTTAGG GATCAGTCTT TTGCTTCCTG TTGCTCCTG CCTGAAAGTA GTTGCCAAGT    120
TGTACTGTTT TATATATCCA CCACAGCATG AGTTAAACCA AAGTCTGGAT CAGCAGACTG    180
CCAGATTTT TTTTAACAAA TTTATTAATC AATACATTTT GTCCATGTCT ACAGTTGTTT    240
ATGGGGGAGA ACTCGAG                                         257
```

(2) INFORMATION FOR SEQ ID NO:1504:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1504:

```
GAATTCGGCC TTCATGGCCT AGGGGACCTT GGGAGAATGT AATCCCTGCC CCTAGTCTCA    60
GTTTCTGCAT CCACGGAAGA GGGGTGAAGA TGGTCCCTAC CCCTCCAGAA TGTCTTTTT    120
TTTTTTTTT AAAAAAAAAA AAAAAAAAAA AAAGTACGTT ATGTTTTCAG ATAAGAACAC    180
TTCTTCATGG ATGACTTGAA ATAATTGCCA TGGTCCCTAA GTTTTCCTCT CTGTAGATGA    240
ATGATATAGC TCAGTATCTA AGCAGTGGAT CCTCGAG                                         277
```

(2) INFORMATION FOR SEQ ID NO:1505:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1505:

```
GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGCCTCCC AAGCTGCTGG TATTACAGGC    60
GTGAACCACT GCACCTGGCC TAATACGATA TTCTTACAAT TTAAAAATG AAAGCAGAGG    120
AATGGTGGCA GGGAAGCTGA CATTTTAAGA GTTCACTTCC TTGTAGTTAT CACAGTTAAT    180
TCTTACTGTT AGAATAAGTG GTAACCTGCC AAGGTCACAT TGCTAGATGT CAGAGCAGAA    240
ATTAGAAATC AGGTCTAGCC AAGGCCATCA CACTTCTCAG AGCATTAAAC ATTCAATTCA    300
GTTAGTGTTT ATTGAACACC TATTGTGTTT TGGCCCTCGA G                                         341
```

(2) INFORMATION FOR SEQ ID NO:1506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1506:

GAATTCGGCC	TTCATGGCCT	AGGCATTTTG	TCTCTAGAAT	TACCCACCCG	TTCCTGCGCT	60
CTACGGTTCT	CCATGCCCCC	TCCAGTTTGG	GGGTCTAAAC	CGAACAGGAG	AGGTGCAGGG	120
GACCAGGAGG	TGTCCTGGCA	CAAAGGTTCT	GGGGTCTCCC	TGGCAAGGGG	TCCCAGGGCC	180
TGGAGCCCCG	GGCCCAGCCA	AAAGCACACA	GCATCAAAAC	ATGTTTITAG	TGGGAAGCTC	240
CAGGCCCTGC	CCCTCCCCGG	GGGCCCTCGAG				270

(2) INFORMATION FOR SEQ ID NO:1507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1507:

GAATTCGGCC	TTCATGGCCT	AGAGCAGGAA	GATTGTGTGA	GTGCTGGGGT	TTGGGGGTGC	60
CCAAGTTGGG	AACCACTGGA	GGGAGAGAGA	GGTAGGAGGT	AGATGGATGG	AGATCAAAGG	120
CCAGGCCTGT	GGCCAAGGGG	GCTGCTAACC	CTTCAACCCT	GTGTTAGCCT	GTACACTCAC	180
CAGGCCAGGC	TCAGCAGGCG	GGCTGTTTAC	CTCCTGGCAG	CAAATGGTCC	AGAATGTGCC	240
CTCGCTGCAG	CCCAGCTGGC	TCCAGAAGGG	GGACCACAGA	GGCTGGAGCT	ATGCTATGCAC	300
AGTGCTTTCT	CCCAACCTTG	CTTCTGAGAA	AAGTGTCCCT	GCGAGGGCCC	TGGAGGAGGG	360
AGCTAGGGAC	CAGCAGAAGG	GCCTAGGTTT	CTGTAGCATC	ATTTTITAGCC	CTGGCTGAAT	420
CTGGGAAGCA	CCTGGTGGCT	TTAACATTCC	CGTTAGCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:1508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 694 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1508:

GAATTCGGCC	TTCATGGCCT	AGTCACAATC	CACTTAAAGA	AGTTTGGTTA	TATTTCACTG	60
AAAATTTTCT	TCCAGAGTAG	GTTTTTTTTC	GTGGGTTGGG	GGGTAACTTT	ACTACAATTA	120
GTAAGTATGG	TGCAGAATTT	CATGCAAATG	AGGAGTGCCA	GCAGTGTGAT	AATTTAAACA	180
TATTTAAACA	AAAACAAAAA	AAATGAATGC	ACAAACTTGC	TGCTGCTTAG	ATCACTGCAG	240
CTTCTAGGAC	CCGGTTTCTT	TTACTGATTT	AAAAACAAAA	CAAAAAAATA	TAAAAAAGTT	300
GTGCTGAAA	TGAATCTTGT	TTTTTTTAT	AAGTAGCCGC	CTGGTTACTG	TGTCCTGTAA	360
AATACAGACA	CTTGACCCCT	GGTGTAGCTT	CTGTTCAACT	TTATATCAG	GGAATGGATG	420
GGTCTGATTT	CTTGGCCCTC	TTCTTGAATT	GGCCATATAC	AGGGTCCCTG	GCCAGTGGAC	480
TGAAGGCTTT	GTCTAAGATG	ACAAGGGTCA	GCTCAGGGGA	TGTGGGGGAG	GGCGGTTTTA	540
TCTTCCCCCT	TGTCGTTTGA	GGTTTTGATC	TCTGGGTAAA	GAGGCCGTTT	ATCTTTGTAA	600
ACACGAAACA	TTTTTGCTTT	CTCAAGTTTT	CTGTTAATGG	CGAAAGAATG	GAAGCGAATA	660
AAGTTTTACT	GATTTTTGAG	ACACTAGACT	CGAG			694

(2) INFORMATION FOR SEQ ID NO:1509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1509:

```

GAATTCGGCC TTCATGGCCT AATGAGGTTT TATCTAGAGG TGATGGGAGA CAGTGACAGA      60
TCATCAGGCA TTAGATTCTC ATAAGGACTG CGCAACCTAG ATCCCTTGAA TGAACAGTTC      120
ACAATAGGGT TCACTCTCCA ATGAGAATCT AATGCTGCCG CTGATCTGAC AGGTGCCAGA      180
GCTCAGGCGG TAATACGAGA GGCTGGAGAT ACAGATAAAG CTTCAAGTTG TGGCCCGCCA      240
CTTACCTCCT CTGTGCGGC CCAGTTCCTA ACAGGCCACA GACCGCTACC AGTCCATGGC      300
CTGGAAGTTG GGGACCCCTC TACTGGGATA TTTATAATTG CATATGTGGT TACCTAATAT      360
TTCCATGATA CAACACTGGT CTAGATTCTA GGCCATTCTC CTTCAAAAAG AACCTTGCTT      420
CCTTACAGTT TTACTGTTTA GCAGCAATGT TTTCTACCCC TTCTTAAAT TTTCAGCCAC      480
CACACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1510:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 313 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1510:

```

GAATTCGGCC TTCATGGCCT ACTCTCTCAT TCCTACCCTC CTCCTCCCA CTCACGCTCC      60
TCCCAATCCC CAAGTCCCTC TCATTCCAC CTTCTCCCTC TCCTCTCCTC ACGCTCCTCC      120
CTATCCCCGA GCTCCTCTCT CATCCCTACC CTCCTCCCTC CCACTCACGC TCCTCCCAAT      180
CCCCAAGGTC CTCTCATTCC CACCTTCCTC CCTTCTCTC CTCACGCTCC TCCCTATCCC      240
CGAGCTCCTC TCTCACTCCC TCCCTCCTCT CATGCTCCTC CCCCCTCTCC TCATGCTCCT      300
CCCCATCCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:1511:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 354 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1511:

```

GCCGGGTGGG CCGGAGGTGG CGCGGCCGCA CGGCTTTGTT CCGGAAAGCC CTTAGGTGGA      60
GAGCGATGTG GGGCGCGGCA GGGGGATCGC GTAGAGGAAC CTTGCGGCAC CGCCTCTCCG      120
GGTCTGGGAA TCTGCTGAAC TCCTTGCTCT TCTTGGGGTC CCTCGAACGC CCCAGCTAAG      180
AAGGGCGGGG GCCTTGCCAG GCGCGGAGCA ACATGACGTT CAAGGCTCTC CTGTGGCTTC      240
TGTAAGAAA TGTTACGTG GGAGCCTGTC CACATGGGCT GACTAAGGA TCTGGCACGA      300
GGAAGAAATA TCACTGCAGA ACCTGAAGCC CTCGTTGGA AGGGTCACCT CGAG      354

```

(2) INFORMATION FOR SEQ ID NO:1512:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 407 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1512:

```
GAATTCGGCC AAAGAGGCCT AGAGCAGCTT GGCTAAAAGT AAGGGTGTCTG TGCTGATGGC      60
CCTGTGCGCA CTGACCCGCG CTCTGCGCTC TCTGAACCTG GCGCCCCCGA CCGTCGCGCG      120
CCCTGCCCCG AGTCTGTTCC CCGCCGCCCA GATGATGAAC AATGGCCTCC TCCAACAGCC      180
CTCTGCCTTG ATGTGCTCC  CCTGCCGCC AGTTCTTACT TCTGTGGCCC TTAATGCCAA      240
CTTTGTGTCC TGGAAGAGTC GTACCAAGTA CACCATTACA CCAGTGAAGA TGAGGAAGTC      300
TGGGGGCCGA GACCACACAG GTGGGAACAA GGACAGGGGG ATTTAAGCAG TCAAAGGAA      360
AAACATGTTA AGACCCTAGA CTTGTATATT GACACACAGA ACTCGAG      407
```

(2) INFORMATION FOR SEQ ID NO:1513:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 422 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1513:

```
GAATTCGGCC AAAGAGGCCT ACATTCATAC AATTACAGAA TTCAAATATT GCAAAGGAT      60
GTGTGTCTTT CTCCCCGAGC TCCCCTGTTT CCCTTCATTG AAAACCACCA CGGTGCCATC      120
TCTTGTGTAT GCAGGGCTAT GCACCTGCAG GCACGTGTGT ATGCACTCCC CGCTTGTGTT      180
TACACAAGCT GTGGGGTGTT ACGCATGCCT GCTTTTTTCA CTTAATAATA CAGCTTGGAG      240
AGATTTTTGT ATCACAATAT AAATCCCACT CGCTCTTTT GATGGCCACA TAATAACTAC      300
TGCATAATAT GGATACGCCT TATTTGATTT AACTAGTTCC CTAATGATGG ACTTTTAAGT      360
TGTTTCCTTT TTTTTCCTTT TTTGCTACTG CAAACGATGC TATCTAGGCC TCTTTGGCCG      420
AA
```

(2) INFORMATION FOR SEQ ID NO:1514:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 485 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1514:

```
GAATTCGGCC AAAGAGGCCT ATGGAATTC AAGACCTGAT GTTTGAGGAG ATGAGGGAAA      60
CTCTTAAAAA TGACCTAAAA GCAGTTTGTAG GAGGAAAAGC TACAATACCT GAGGTAAAGA      120
ATTCAGAGAA CTCCAGTAGT AGGACAGAGT TTCAGCAAAT AATCAATTGA GCATTACAAA      180
AAACAGGGAT GGTAGGGAAA ATAGAAGGAG AAAACTCTAA AATAGGTGAT GATAATGAAA      240
ATTTAACCTT TAAATTAGAA GTAAATGAGC TGAGTGGTAA ATTAGACAAC ACTAACGAAT      300
ACAATAGTAA TGATGGTAAG AAATTACCCC AGGGTGAATC ACGAAGTTAC GAAGTCATGG      360
GAAGTATGGA AGAAACCTTA TGCAATATAG ATGACAGAGA TGGAAATCGC AATGTCCATT      420
TAGAATTTAC AGAAAGAGAG AGTAGGAAGG ATGGAGAGGA TGAATTTGTC AAAGAAAAAC      480
```

TCGAG

485

(2) INFORMATION FOR SEQ ID NO:1515:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1515:

GAATTCGGCC	AAAGAGGCCT	AGGCACAGAA	GGGTGGTGAG	TGTGATCAAA	TCTAGTCTCA	60
CTCCCACTTT	TTAGTCTCAC	TCCTACTTTT	GTCCACCACC	CAGGCACGGA	GAGAAAGGAA	120
TGTTTAGCAC	AAGACACAGC	GGAGCTCGGG	ATTGGCTAAA	CTCCCATAGT	ATTTATGGTG	180
GCCGCCGGCG	GGGGCCCCAG	CCCAGCTTGC	AGGCCACCTC	TAGCTTTCTT	CCTACCCCAT	240
TCCCGGCTTC	CCTCCTCCTC	CCTGCAGCC	TGGTTAGGTG	GATACCTGCC	CTGACATGTG	300
AGGCAAGCTA	AGGCCTGGAG	GGTCAGATGG	GAGACCAGGT	CCCAAGGGAG	CAAGACCTCG	360
CGAAGCGCAG	CAGCCCCGGC	CCTAGGCCTC	TTTGGCCGAA			400

(2) INFORMATION FOR SEQ ID NO:1516:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 145 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1516:

GAATTCGCGG	CCGCGTCGAC	GTCGACGCGG	CCGCGAATTC	GGCCAAAGAG	GCCTACCCAT	60
GTCAATCAAG	ATGGGTGATT	ATGAAATGCC	AGACTTCTAA	AATAAATGTT	TTGGAATTCA	120
ATGGGTAAAT	AAATGCTGGC	TCGAG				145

(2) INFORMATION FOR SEQ ID NO:1517:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 277 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1517:

GCTGGACCTC	CTGTGCAAGA	ACATGAAACA	GCTGTGGTTC	TTCCTTCTCC	TGGTGGCAGC	60
TCCCAGATCG	GTTCTGTCCC	AGGTGCAGCT	GCGGGAGTCG	GGCCCAGGAC	TGGTGAAGCC	120
TTCGGAGACC	CTGTCCCTCA	CCTGCACTGT	CTCTGGTACT	TCCGTCAGAA	GTGTTAGTTA	180
CGACTGGAGT	TGGCTCCGGC	AGTCCCCGGG	GAAGGGACTG	GAGTGGCTTG	GAGAGATTGA	240
TTACAGGGGG	AGAGGCAATT	ACAACCCGTC	CCTCGAG			277

(2) INFORMATION FOR SEQ ID NO:1518:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 161 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1518:

GAATTCGGCC	AAAGAGGCCT	ACTCATGCAC	CTAATTGGAT	CCTATCTTTG	TGTTGTTAGC	60
TGGTTATTAT	GCAGACTTTA	TTATGTGGTT	GTTTTATAGT	GTCCATAACC	TATGTACTTA	120
AGTTTGTTTT	TGTGGTGGCG	CTTCCAATTA	GGGCTCTCGA	G		161

(2) INFORMATION FOR SEQ ID NO:1519:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 561 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1519:

GAATTCGGCC	TTCATGGCCT	AATATAAAAC	AATGTTTTTC	AAGGCATTAT	ATAATAGGCT	60
AAGGACAGTG	ACCTCCAAGA	GACAGCAAAC	AAGGTAATAC	CTGTGACTGC	TCCAGCTTAC	120
TGCCTTGAGA	GAATTAATAG	TAGGTTTGTG	GTACAGGGAG	GGAGAATCCA	GTCAGAGCCC	180
AGCGGACTTG	CTGAATTAAG	GAAATGGAGC	TGAGAGTCCA	GAGAGACCAA	CATGGCTAAA	240
GTTGTCATGA	CAGAGCACTC	AGAACTAGAG	AGCTGCACAG	CAACATAACC	TAAGAGCTCT	300
GAAGATAATC	TCCCTCAAAT	ACTCAGCTGA	GTA CTGATCA	ACATATATGT	GTGAGGAAGC	360
TATCTGAGGC	TGACAAAGAA	CTGCCTGAAG	AGATTAGAGG	GAACAGTACT	TGGCACTCAC	420
ACAGAATTGG	AAACTGTACC	TGTTCCCAAC	AGCCAAACTG	GAAAAACCTC	AGGATTCATG	480
GGGTACTCAG	AAAGGACTTG	CATCAGGTAT	GGGGAATAAT	TAGCCCTAGA	CAGAGCACTG	540
CTCTAATCCC	ATCCACTCGA	G				561

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145,

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ

ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235,

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109,

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.

INTERNATIONAL SEARCH REPORT

International Application No

P. 98/06956

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/12 C12N5/10 C07K14/47 C12Q1/68 A61K38/17

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N C07K C12Q A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 527 896 A (WIGLER MICHAEL H ET AL) 18 June 1996 SEQ ID no. 31, Accession no. I22491 ---	4
A	WO 97 07198 A (GENETICS INSTITUT) 27 February 1997 see the whole document ---	1-8
A	WO 97 04097 A (GENETICS INST) 6 February 1997 ---	1-8
A	ADAMS M D ET AL: "3,400 NEW EXPRESSED SEQUENCE TAGS IDENTIFY DIVERSITY OF TRANSCRIPTS IN HUMAN BRAIN" NATURE GENETICS, vol. 4, no. 3, July 1993, pages 256-267, XP000611495 see the whole document ---	1-8
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *Z* document member of the same patent family

Date of the actual completion of the international search

3 July 1998

Date of mailing of the international search report

3 0. 09. 98

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INTERNATIONAL SEARCH REPORT

International Application No.

98/06956

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 536 637 A (JACOBS KENNETH) 16 July 1996 cited in the application see the whole document ---	1-8
A	JACOBS K ET AL: "A NOVEL METHOD FOR ISOLATING EUKARYOTIC CDNA CLONES ENCODING SECRETED PROTEINS" JOURNAL OF CELLULAR BIOCHEMISTRY - SUPPLEMENT, vol. 21A, 10 March 1995, page 19 XP002027246 see abstract ---	1-8
A	WO 90 14432 A (GENETICS INST) 29 November 1990 see the whole document ---	1-8
A	WO 96 17925 A (IMMUNEX CORP) 13 June 1996 see the whole document -----	1-8

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 98/ 06956

B x I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see further information sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see further information sheet, subject 1.

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

98/06956

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5527896 A	18-06-96	CA 2080920 A EP 0537173 A EP 0666314 A WO 9116457 A	21-10-91 21-04-93 09-08-95 31-10-91
WO 9707198 A	27-02-97	US 5707829 A AU 6712396 A AU 6768596 A EP 0839196 A EP 0851875 A WO 9704097 A	13-01-98 18-02-97 12-03-97 06-05-98 08-07-98 06-02-97
WO 9704097 A	06-02-97	US 5707829 A AU 6712396 A EP 0839196 A AU 6768596 A EP 0851875 A WO 9707198 A	13-01-98 18-02-97 06-05-98 12-03-97 08-07-98 27-02-97
US 5536637 A	16-07-96	US 5712116 A	27-01-98
WO 9014432 A	29-11-90	US 5580753 A AT 147436 T AU 637620 B AU 5928990 A CA 2056997 A DE 69029657 D DK 473724 T EP 0473724 A ES 2099096 T JP 4506006 T US 5734037 A US 5414071 A	03-12-96 15-01-97 03-06-93 18-12-90 24-11-90 20-02-97 14-04-97 11-03-92 16-05-97 22-10-92 31-03-98 09-05-95
WO 9617925 A	13-06-96	AU 4639396 A CA 2206488 A FI 972390 A NO 972455 A	26-06-96 13-06-96 05-06-97 06-08-97